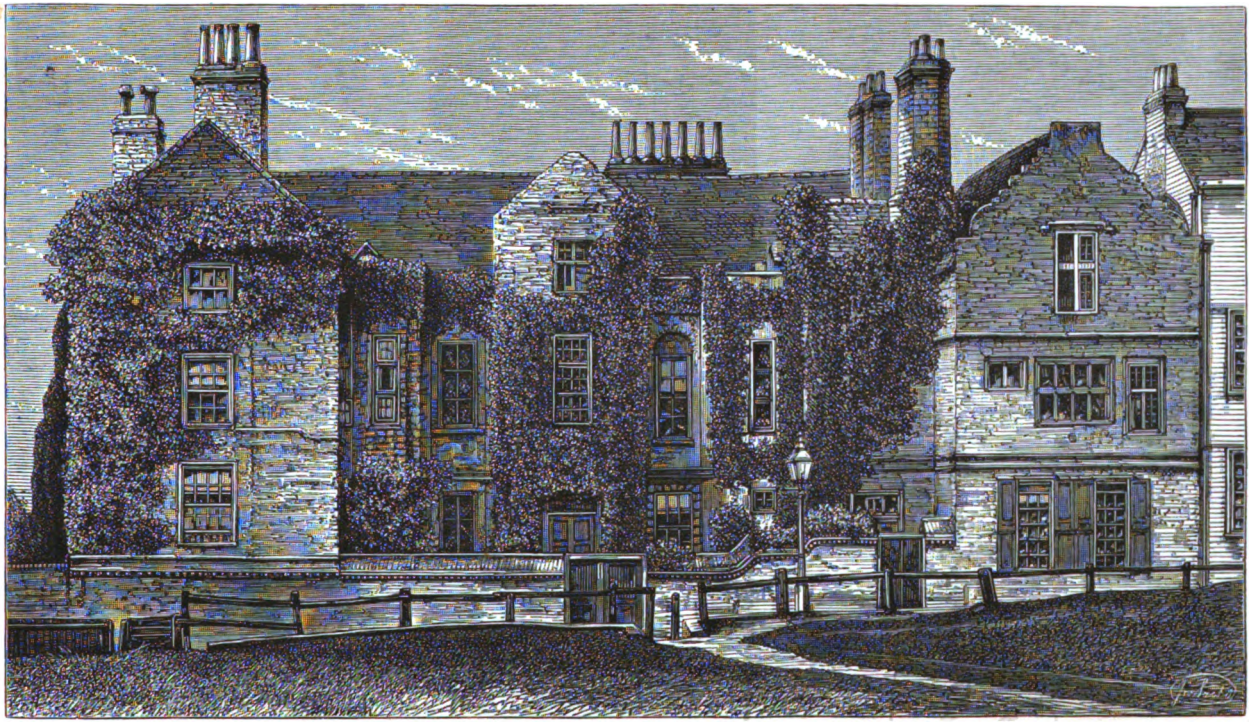

RESTORATION HOUSE, ROCHESTER, A.D. 1880.

VISIT

OF THE

LONDON AND MIDDLESEX
Archæological Society

TO

ROCHESTER AND STROOD,

ON

THURSDAY, 26 *JUNE*, 1884,

UNDER THE PRESIDENCY OF

C. ROACH SMITH, F.S.A.,

Vice-President of the Society.

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1884.

LONDON AND MIDDLESEX ARCHÆOLOGICAL SOCIETY.

VISIT TO ROCHESTER AND STROOD.

A large number of the Members of this Society and their friends assembled on Thursday, 26 June, 1884, at Rochester and Strood, for the purpose of inspecting some of the many and varied matters of antiquarian interest to be met with in both places. By the courtesy of the authorities of the London Chatham and Dover Railway special arrangements were made for the comfort and convenience of the party. It reached Rochester Station about 11 a.m., where the train was met by Mr. C. Roach Smith, F.S.A., and Vice-President of the Society, together with other friends and visitors. The Corporation of Rochester had liberally placed the Town Hall at the service of the Members, and accordingly the company proceeded to this building for the purpose of holding a short preliminary meeting prior to carrying out the more important features of the programme for the day. The meeting took place in the Council Chamber, which was amply filled. Among those present were R. S. Ferguson, F.S.A., ex-mayor of Carlisle, Arthur Goodman, F.R.I.B.A., W. H. St.John Hope, F.S.A., Alfred White, F.S.A., E. W. Brabrook, F.S.A., E. Baddeley, Esq., Henry W. King, Hon. Secretary Essex Archæological Society, Thomas Morgan, F.S.A., Treasurer British Archæological Association, Edward Baxter, Esq., John Leighton, F.S.A., Arthur Cates, F.R.I.B.A., J. R. Tippetts, Esq., H. M. Clark, Esq., F. W. Chantler, Esq., Canon Burrows, B.D., H. W. Wright, Esq. (Frindsbury), Dr. J. J. D. Burns, G. Robinson, Esq. (Strood), Herbert Fry, Esq., John

Runtz, Esq., J. Westwood, Esq., R. Mansfield, Esq., F. Waller, Esq., George Mills, Esq., J. G. E. Sibbald, Esq., W. C. G. Turner, Esq., John Tolhurst, Esq., J. F. T. Wiseman, Esq., John E. Price, F.S.A., Secretary, and many others, in addition to a large gathering of ladies.

Mr. C. Roach Smith, F.S.A., was unanimously voted to the Chair, and, after a few preliminary remarks, opened the Meeting with the following Address :—"Although Rochester, at the present day, shows little or nothing of its Roman origin, I cannot refrain from making a few remarks on what it must have been. It was situated upon the great military road which, fed by the three chief ports, Dover, Richborough, and Lymne, led in a straight line to London, and thence to the north of Britain. The Roman legions and auxiliary forces entering Britain by these ports must have rested, after the first day's march, at Canterbury (*Durovernum*). The next march, rather long, would be to Rochester (*Durobrivis*). Both of these towns were strongly walled, as were all stations where troops were quartered for the night. The intermediate station, *Durolevum*, probably at Ospringe, was a *mansio* or *mutatio*, for resting and for the change of horses for the public service. It was on the scale of a large hostelry, or caravanserai, and was not walled.

Like Canterbury, London, and some other towns, it is probable that Durobrivis was twice walled, the later circumvallation being marked by the distinguishable line of the mediæval wall erected upon or grafted into its ruins. At the back of the Grammar School was to be seen, and probably may still, part of what may have been the core of the Roman wall. That it was stripped of the squared facing stones at an early period, for building material, is evident from the fact of the Norman castle wall being, in part, constructed upon the older wall, already denuded of the facing stones, except the two or three lowermost courses. This can be seen from the Esplanade. During an excavation in the street leading to Boley Hill, just beyond the cathedral, and opposite the office of Messrs. Essell, Knight, and Arnold, some years since, I accidentally noticed that, at a considerable depth, the workmen had come upon a Roman wall, which from its width and admirable construction must have been part of what I conjecture was the original city wall; but no facilities were afforded for determining the fact. Why Roman masonry is not to be seen in the walls of Rochester and Canterbury is explainable from the denudation in early

times of the facing stones, and from demolitions having been repaired in the Middle Ages and in modern times. An accumulation of several feet of earth completely conceals what is left of the lower courses of the Roman wall. Thus it has been denied that what we see of the wall of Canterbury has nothing Roman in it; but I feel confident that, were excavations made, the lower part of the Roman wall, more or less in its integrity, would be revealed. Three societies have had congresses in Canterbury; but I and the late Mr. John Brent could never succeed in getting this simple experiment tried. Moreover, I am not aware of any mediæval wall wide enough to carry promenades upon it, such as we find at Canterbury, Chester, Colchester, and Chichester.* In the North of Britain it was quite different, as the vast collection of inscriptions in Dr. Bruce's *Lapidarium Septentrionale* will show. It is in itself a history of Northern Britain under the Roman rule.

Not one fragment of sculpture, not one lapidary inscription, has been recorded as discovered in Rochester; yet the town must have possessed public buildings, temples, a barrack, and villas. As regards inscriptions, those precious helps to history; often histories in themselves; they most usually follow the fixed presence of the military; and, the south of Britain having readily submitted to the Romans, no legions or cohorts were permanently quartered in it.† Thus, for centuries, Roman Rochester may be said to exist only in name, and its history is left wholly to the imagination. Yet through those long centuries the town teemed with life. Not one of the hundreds of years passed without the rotation of agricultural processes such as we see around us; not without the civic animations, contentions, hopes, fears, and aspirations, just as at the present day. Great events must have occurred; great men must have lived; but there was no press, no historian, to record them :—

Vixere fortes ante Agamemnona
Multi; sed omnes illacrymabiles
Urgentur ignotique longa
Nocte, carent quia vate sacro.‡

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* In the south-east wall of this town is a bastion of the Roman wall in good preservation. For a knowledge of this I am indebted to my friend Mr. John Harris.

† Of course, not until, in after-times, the Saxon shore was fortified.

‡ Horace, lib. iv. carm. ix.

Your agenda for the day is copious, and will require some exertion. After Mr. Hope has conducted you round the castle and through the cathedral, you will proceed to see Restoration House and its artistic treasures. Not the least of these, in my opinion, are the paintings by Mr. Stephen Aveling himself. They are executed on panel in a high style of classic art, equalled only by the mural paintings for St. Bartholomew's chapel, also executed by Mr. Aveling. If your visit had been solely restricted to these paintings, you would not regret your visit to Rochester.

In going to Restoration House you will probably pass through The Vines. In the Middle Ages (and probably in earlier times) this was the site of an extensive vineyard, which produced wine enough for the ecclesiastical establishment, and also for sale. There were vineyards throughout Kent, as well as at the Temple, at Cobham, and at Halling, some interesting particulars of which I have published.* The late Rev. Lambert Larking, who supplied me with some documentary evidence respecting the vineyard at Halling, was puzzled why the Archbishop should exact from his tenants blackberries in exchange for white wheat. The blackberries, no doubt, were for giving colour to the wine. The extinction of the vineyards did not arise from any change in the climate, but from the increased importation of foreign wines.

Eastgate House will next be visited. It affords a fine example of a gentleman's residence of the Elizabethan period, in a good state of preservation.

The charity founded by Watts, of Satis House, whose bust you will see in the cathedral, will then engage your attention. There you will also find some interesting remains of early domestic architecture, particularly in the dormitories. The late Mr. Thomas Aveling, whose memory is justly held in esteem, believed that such institutions, though founded in the spirit of benevolence, tend to promote vagrancy and improvidence; and, as he was a true philanthropist, and a man of sound sense, there must be something reasonable in his view; but this is not a matter in your programme; not a subject for discussion on an occasion like this. I merely mention it for your private consideration.

Then, I shall have the pleasure of rejoining you at Mr. Humphrey Wickham's, and explaining to you the Roman and Saxon remains

* *Collectanea Antiqua*, vol. vi. p. 76 *et seq.*

discovered at Strood; and the ancient and modern state of the cemetery in which they were excavated."

At the conclusion of this address Mr. Roach Smith called upon Mr. W. H. St. John Hope, F.S.A., to describe the various objects of interest on the table, comprised in what may be termed the Civic Regalia, kindly lent for exhibition by the Mayor and Corporation of Rochester. Mr. Hope remarked :—

The Corporation Plate of the city of Rochester consists of the following articles :—(1) The great mace ; (2) and (3) two smaller serjeants' maces ; (4) the silver oar ; (5) the sword ; (6) the Mayor's chain ; (7) a silver tankard ; (8) and (9) two constable's staves ; (10) (11) (12) (13) (14) (15) (16) (17) borseholders' staves ; (18) the water bailiff's silver oar.

(1) The great mace is of silver-gilt, measuring 4 feet 1 inch long. It is of the usual type of a staff, divided by knops into three portions, terminating in a larger knop as a foot, and supporting a bowl-shaped macehead surmounted by a four-arched crown. The cap inside the latter has the royal arms of the Stuarts. The macehead is divided by female caryatides into four panels, each containing a badge—a rose, thistle, harp, and fleur-de-lis, respectively—crowned, and between the letters C. R. The knops are ornamented with acanthus foliage, and the staff with a spiral pattern of roses and thistles. Under the foot is a shield with the city arms—on a cross the letter r, and on a chief a lion of England. Round the foot is this inscription :—

" *This Mace was made for the* Citty *of* Rochester *in the year 1661*
Mr Iohn Mabb *being then* Major "

and on a lower rim an additional inscription records that the mace was

" *Repaired and New Gilt in the Mayoralty of* John Batten Esqr.
1748."

The mace bears the following hall-marks :—

1. The maker's—I. K., in a plain shield, with a cinquefoil in base ;
2. The leopard's head crowned ;
3. The lion passant gardant ;
4. The letter B, being the London date-letter for 1661-2.

Nothing is known of the history of this mace beyond what itself tells, and that the crown was renewed and enlarged in 1748.

(2) and (3) The two serjeants' maces are of silver, and identical in size and pattern. They are 2 feet 0½ inch long, and of similar

character to the great mace. The crowns surmounting them are, however, far more effectively formed and less clumsy. Their history is given in the following inscription round the foot :—

James Hulks Esqr Mayor 1767.
Fuller White Fecit.

and

Repaired & Burnished in the Mayorality (sic) of John Batten Esqr.
1810.

From the city accounts we further learn that in April, 1767, three old small maces were ordered to be sold towards the payment of the two new ones, and that Mr. Fuller White was paid 34*l.* 2*s.* 9*d.* for his work.

The hall-marks are :—

(1) The letter ſſ, being the London date-letter for 1767-8 ;
(2) The leopard's head crowned ;
(3) The lion passant gardant ;
(4) The maker's, a script F. W. in an oblong with two opposite corners clipped.

(4) The silver oar is carried before the Mayor as Admiral of the Port, in token of the Admiralty jurisdiction on the Medway. This privilege is exercised by only a few other places, including Yarmouth, Dover, Southampton, and, I think, Plymouth. The Rochester Oar is 3 feet 3½ inches long, and consists of a plain staff divided by two knops, and terminating in a blade 12⅝ inches long, and 5$\frac{1}{16}$ broad at the end. On the blade are, on one side the royal arms, gilt, and on the other four crowned badges—a rose, harp, thistle, and fleur-de-lis. On a disc at the end of a staff are the city arms. Round the base of the blade is inscribed—

Benjamin Graydon Esqr. *Mayor 1748.*

The oar bears these hall-marks :—

(1) The lion passant gardant ;
(2) The maker's, Ca in a shield ;
(3) The leopard's head crowned ;
(4) The letter n in a shield—the London date-letter for 1748-9.

The silver oar is first mentioned in the records in 1631. It was ordered to be "new gilt as it was formerly done" in 1748, but seems to have been made anew instead. An item in the accounts

for that year of 33*l.* 17*s.* paid to Mr. West "for the Mace, &c.," may refer to this fact, of which we have no further evidence.

(5) The sword, which is worn by the Mayor as Constable of the Castle of Rochester, is of modern workmanship. It was presented to the city by John Ross Foord, Esq., when Mayor, in 1872. The ornaments of the handle and scabbard are of silver gilt.

(6) The Mayor's chain, which is also of modern date, is of gold, and exceptionally massive and handsome. It consists of 16 large shield-shaped links embossed with the city arms, which join to a larger link with the monogram L. L. From this hangs a large pendant with the city arms enamelled, and on the back an inscription recording its gift to the city by Lewis Levy, Mayor, 1875, in remembrance of his father, and in acknowledgment of the donor's election at the age of 26 to the chief magistracy of the city. There are also two smaller pendants with enamelled representations of the city seals.

(7) The tankard is of silver, and of the ordinary drum-shape, with the city arms engraved on the front. It is the survivor of a pair formerly possessed by the city. Under the bottom are engraved the letters · I * E ·

The hall-marks are :—

(1) The maker's, a shaped shield with M. G, and in base a fleur-de-lis between two pellets ;
(2) The leopard's head crowned ;
(3) The lion passant gardant ; and
(4) The date-letter, which is unfortunately imperfectly struck. It looks like the London date-letter O for 1631-2.

(8) and (9) The constables' staves are 6 feet 8½ inches long, and consist of wood staves painted black, terminating in a silver knob. On the top are engraved the royal arms and the letters G. R., and on the side the names of the Mayor, Benjamin Graydon, Esq., and of the then constable—in the one case Richard Chicheley and in the other William Gregory—with the city arms and the date 1761. One has in addition * I * H * C 1773.

The hall-marks are :—

(1) The letter C, being the London date-letter for 1760-1 ;
(2) The leopard's head crowned ;

(3) The lion passant gardant;

(4) The makers', T C . W W in a circle, for Thomas Whipham and Charles Wright.

(10) to (17) The eight borseholders' staves are exactly similar in design to the constables', except that they are on an average only 6 feet long, and in place of the constable's name is that of the ward of the city which the borseholder represented, such as East Gate Borough, Middle Borough, &c.

The hall-marks are also identical, excepting in one case where the knop, although dated 1761, is really 37 years later, as appears by the marks:—

(1) The maker's, R E E B, in a quatrefoil;
(2) The lion passant gardant;
(3) The leopard's head crowned;
(4) The letter C, being the London date-letter for 1798-9;
(5) The king's head (to dexter).

(18) The water-bailiff's silver oar is another emblem of authority almost peculiar to Rochester. It is the badge of office of the water-bailiff when arresting a person on board a vessel. Other examples remain at Dover, Deal, and Colchester; but, while these resemble one another in being like a constable's staff with a small oar in place of the ball of the crown, the Rochester one consists of a short handle with a longer blade, the whole 10½ inches long. On one side of the blade are engraved the royal arms, which are gilt, and on the other the city arms, also gilt, surmounted by "Rochester." Below this—

Robt Dawson
WATER BAILY 1721

The hall-marks are:—

(1) The lion's head erased;
(2) Britannia;
(3) The letter H in a plain shield, being the London date-letter for 1723–4;
(4) The maker's, E L in an oblong.

The use of the lion's head erased and Britannia after 1720 shows that this oar is made of silver of the higher standard.

The Mayor and Corporation of Rochester have the privilege, granted

to them by Bishop John Lowe, in 1447,* of carrying their maces into the cathedral church on state occasions.

Mr. A. White, F.S.A., remarked that the regalia of old corporations sometimes presented clear evidence of the great importance of a place once famous for its extent, wealth, and trade, which circumstances have reduced to a small market-town, or even to a more humble position. This is well illustrated by the preservation of the regalia of Thetford, where, amongst other ancient plate belonging to this place, we find a mace of large dimensions and great beauty, worthy to represent the town when an important mint and a bishop's see, and containing parishes, but now reduced to parishes, and, except for its history, a place of small importance.

Mr. Richard S. Ferguson, F.S.A. (on being called upon by Mr. Hope), said that he had not expected to have been asked for any observations, and was wholly unprepared, having never seen the beautiful municipal regalia of Rochester until he came into the room. One boast he could make: big as is the magnificent Rochester mace, that of Carlisle, which for two years was carried before him as mayor, is bigger, being 4 feet 2 inches in length, thus beating the Rochester mace by 1 inch.

The earliest emblem of authority that he found carried before a mayor was a simple white wand of wood. Thus, in the reign of Queen Elizabeth, three officers from Norwich, who made a tour into the North, noted that the mayor of Carlisle was distinguished from his brethren only by his white wand. The mayor of Berwick-on-Tweed carried the same, and, on the accession of James I. to the English throne, the mayor handed his wand over to the royal officials, by whom it was, with some complimentary remarks, shortly returned. To this day the mayor of Carlisle carries the white wand; nor is he singular in this.

Maces, the speaker divided into two classes, great or mayor's maces,

* "Concedit eciam idem episcopus pro se et successoribus suis consenciente priore et capitulo, quod Johannes ballivus qui nunc est, sicut et omnes successores sui ballivi Roffen. faciat coram se deferri per servientes suos *clavam vel clavas suas vocatas Macesse* ad et in ecclesiam non solum parochialem sed eciam in ecclesia cathedrali et cimiterio, presertim diebus festivis et processionibus ac sermonibus solempnibus et in recepcione ac installacione episcoporum ibidem aliisque temporibus congruis."—*Reg. Roff.* 577.

small or sergeant's maces. The first class consisted of those which were made for the purpose of being carried in state before the mayor, generally of great size, though the one on the table was of unusual size, there being very few larger. The large bowls frequently unscrew and form drinking or loving cups; but one small corporation in Wales owns a very singular mayor's mace, simply a two-handled drinking-cup with a wooden pole stuck up its foot. The second class are the maces carried by sergeants-at-mace as their insignia of office, and which they produce when serving process or otherwise executing their office. The earliest sergeants-at-mace carried actual military maces with flanged heads, and the present maces are nothing but the military ones reversed; the flanges have dwindled down to very ornamental scrolls at the lower end, as on the Rochester ones, while the other end has swelled into a formidable bowl-head. The transition is well shown by two sets of sergeants' maces at Carlisle; the earlier still have the flanges in a modified and ornamental form; the more modern, of 1646, preserve them as a mere button. These maces were carried by the sergeants-at-mace in their girdles, in their pockets, or in the sleeves of their gowns, ready for production when necessary. Hence they were of small sizes originally, but when new sets were got in the last and present century they were generally made larger and with arched crowns, for their original use had in great part become obsolete, and they became mere insignia of state when the sergeants-at-mace attend upon the mayor. The Carlisle ones, purchased in 1650, at a cost of 12*l.*, are only 9 inches long, and go easily into the sleeve of a gown; the Rochester ones, made in the next century, are larger. Rochester does not appear to possess a sword of state, the emblem of criminal jurisdiction, as the mayor's mace with the royal arms is of municipal independence; and no municipal mace is a proper mace unless it bears the royal arms to show that the mayor wields some of the royal authority. But Rochester possesses two silver oars, the insignia of the Admiralty jurisdiction over the Medway, which its mayor still enjoys; like maces, these oars divide into two classes, great and small; the former to be carried in state before the mayor, the latter to be produced by the water-bailiff when serving process. On the table were interesting examples of each class, and the speaker congratulated Rochester on their possession.

The speaker believed that now a great mace, a chain, and a gown

were part of the idea of a mayor; he could not conceive the idea of a mayor without one or other of the three, and no special authority seemed necessary for their assumption; but a municipality could not have sergeants-at-mace and their maces without special charter. Many towns possessed other objects in their regalia beyond maces, swords, oars, and chains; to wit, rings, and chains for sheriffs, for mayoresses, and for the waiters. York possessed a chain for the lady mayoress, and it was weighed out to her at her entering on her office, and again when she returned it; this is ungallant of York.

At the conclusion of Mr. Ferguson's remarks, a vote of thanks was unanimously accorded to the Mayor and Corporation of Rochester for their kindness in placing the Town Hall at the disposal of the Society. Leaving the visitation of the castle until after lunch, the following preliminary observations were made by Mr. W. H. St.John Hope, F.S.A.*

The castle of Rochester is situated on a low promontory overlooking the Medway, commanding the passage of the great Roman way from Canterbury to London. The site covers about half of the western front of the city. The present fortress was preceded by strong earthworks—probably Roman. These enclosed an area of about seven acres and a quarter, and comprised not only the present castle precinct, but the entire mound known as Boley or Bully Hill. This extensive area was defended on the west by the Medway, and on the other three sides by a ditch which started from the river at the north-west angle, and after passing round to and along the east side divided into two portions, one of which returned to the river immediately to the south of the present keep, while the other proceeded onwards and encircled the mound of Boley Hill. These ditches may still be traced without much difficulty.

We know that the city was walled from Ethelbert's charter to Justus in 604, granting land *from southgate west and along the walls.* Beda, in mentioning the name of Bishop Putta at the Synod of 673, describes him as *Episcopus castelli Cantuariorum quod dicitur Hrofescæstir. Castellum* here, however, may mean the fortified city. The place was attacked several times by the Danes in the ninth century, and the *burh* or mound of Boley Hill is said to have been thrown up

* For most of this information I am indebted to Mr. G. T. Clark's valuable and exhaustive paper on Rochester Castle in *Archæological Journal*, vol. xxxii.—W.H.St.J.H.

by them in 884, but it is doubtful whether time would have permitted this to have been done in the short interval that elapsed before Alfred attacked them. Mr. G. T. Clark thinks the *burh* was thrown up as a strong residence for the bishop. It would, of course, be fortified with wooden defences.

Just before the Norman Conquest the castle seems to have been in Earl Godwin's hands. It was afterwards in the hands of the famous Odo of Bayeux, who exchanged it with the king.

About 1076 William Rufus restored to the see of Rochester the long alienated manor of Hadenham, but on condition that Bishop Gundulf, "who was very knowing and efficient in masonry as an architect and builder," should build him a *castle*. Gundulf accordingly built a *castle—fecit castrum*—at a cost of 60*l.* At the same time he built a *castrum* for himself, probably the ruined campanile on the north side of the choir of the cathedral church. It is the common notion in Rochester, relying on this statement, that Gundulf's *castrum* is the present keep. It is high time such an idea was exploded, considering that the actual proofs of the building of the keep, *nearly twenty years after Gundulf was in his grave*, were published by the Rev. C. H. Hartshorne in the *Archæological Journal** so long ago as 1843.

Rochester Castle was taken in 1088, after the famous siege, by William Rufus, and remained in the hands of the crown till 1126. In that year Henry II. granted to William de Corbeuil, Archbishop of Canterbury, and his successors, "the perpetual charge and constableship of the castle of Rochester." Archbishop William, we are told,† thereupon built a handsome tower—*egregiam turrim*—which is without doubt the existing keep. From various data we are able to fix the limits of its erection between 1126 and 1139. No traces are to be found in this keep of an earlier tower, nor are there any signs of older materials, and Gundulf's 60*l.* *castrum* can hardly have been a tower at all. It is to be noted, however, that a large portion of the river wall of the castle area is undoubtedly Gundulf's work, and presents the peculiar rude herring-bone masonry characteristic of his buildings throughout Kent; and, as the term *castrum* does not necessarily mean the keep, this river-wall may be the work which Gundulf built. The future history must be dismissed very briefly.

* Vol. xx. page 211.

† Gervase, *Decem Scriptores*, p. 1664.

In 1215 the castle was besieged by King John, and, after a protracted assault, was captured, owing to the destruction of the south-east angle of the keep by a mine. The necessary repairs were made good in 1225. It was ordered to be whitewashed 24 Henry III. In 1264 it was again besieged, this time by the Barons, to whom it was surrendered after the battle of Lewes. Sundry repairs of an important nature were executed in 1367 and 1368 under the superintendence of the Prior of Rochester. By this time the castle was again in the hands of the king, who granted it to various constables successively. Finally James I. in 1612 granted it to Sir Anthony Weldon. After changing hands many times it at length came into the possession of the Earl of Jersey, who sold it in October 1883 to the Mayor and Corporation of Rochester, who now hold it.

The party then adjourned for luncheon. On reassembling at the castle at 2 o'clock, Mr. Hope continued his description:—

Unlike the laying-out of a monastery or parish church no rules were followed in building a castle—everything depended on the site. Here at Rochester the Roman earthworks were taken possession of by the Normans, who fortified them in the usual manner. The Normans had two types of keep—(1) the shell keep, (2) the rectangular tower. The rectangular tower was always employed when the site was a new one; the shell keep on an old site and where there was a natural or artificial mound. At Rochester the old area, which included the mound, was thought either too large or inconvenient; so a curtain wall was built along the river and along the scarp of the ditch round the larger area only, thus excluding the *burh*, which was perhaps lowered. A large rectangular keep was afterwards built by Archbishop William de Corbeuil, between 1126 and 1139, in the south-west angle."

The new enclosure contained about 4¼ acres. It was entered by a gateway at the north-east angle, the approach to which was by a drawbridge over the ditch, afterwards replaced by a steep causeway carried by a bridge. This still remains, but the gatehouse was needlessly destroyed only a few years ago. At the north-west angle of the *enceinte* was a large bastion with a lift for stores. Near this was a sally-port. In the south-west angle, behind the keep, was another bastion, destroyed during the siege of 1215, and replaced by the existing fine drum tower in the same position. The towers along the east wall are late Decorated or early Perpendicular. Formerly a cross wall just to the north of the keep divided the area into a north and south ward.

This has, however, quite disappeared, as also have all the castle buildings except the keep. The east curtain wall is carried upon arches.

The keep, though surpassed in size by a few others, is one of the loftiest in England. It is 125 feet high to the top of the turrets, which are 12 feet high. The walls are 12 feet thick, to allow of the construction of mural galleries. Externally the keep is distinguished by the characteristic battering plinth and pilaster buttresses; internally by the cross wall, 5½ feet thick, dividing the keep into two parts. This wall usually does not reach higher than the first-floor, but here it is carried right up to the top, and along its summit ran the main gutter between the two roofs. It is pierced by doorways at every floor.

Another remarkable feature is the well, which is sunk beneath the centre of the cross wall, in the thickness of which a circular pipe 2 feet 9 inches in diameter is carried up to the top of the building, with a small arched door opening into it on each floor.

On the north side of the keep is the forebuilding, which contains the entrance. It consists of a staircase, gatehouse, drawbridge, and vestibule tower. The stair begins on the west side of the keep. It then turns, and is carried along the north face. Immediately on turning the corner the ascent passed through the gatehouse, which was a small tower 12 feet square, built with its west wall flush with the face of the pilasters on the west side of the keep. The door was only defended by a drawbar. Just before reaching the vestibule tower the staircase stops short, thus forming a pit 9 feet wide and 15 feet deep. This was crossed by a drawbridge. It was also spanned by an arch carrying the parapet which covered the stair. The vestibule tower is divided into four stories. The basement was doubtless a prison. One of the present entrances now opens into it, but is only a hole knocked through the wall. The first floor is nearly on the same level as the basement of the keep, and was perhaps used as a prison of milder character. The second floor formed the vestibule to the main entrance into the keep. It was entered from without through a door protected by a drawbar only. The upper floor is of doubtful appropriation. According to some authorities it was the kitchen; others maintain it was a chapel—which its division into a nave, and chancel with vaulted roof, with a handsome arch separating them, seems to corroborate.

The keep is divided into three floors.

The basement, like the other floors, is divided into two nearly equal

portions by the cross wall. It was probably used for stores. Light was admitted through very narrow roundheaded loops. The first floor, doubtless a barrack, is characterised by its plainness. In contains the entrance doorway, which has a good Norman arch about 6 feet wide. The door was strengthened by a portcullis and a huge drawbar. This floor contains two good examples of fireplaces, the flues of which are singular, inasmuch as they end in a small hole in the outer wall only a few feet up. In the east wall is a small postern which had a plank bridge to the curtain. This floor was lighted by square-headed loops, 1 foot wide by 1 foot 6 inches high, set in a large and lofty recess. The main or state floor, despite the greater amount of adornment, must have been very cold and cheerless. It has two tiers of windows. The upper tier also lights a mural gallery. Each half of this floor is furnished with a fireplace; and the cross wall, instead of the usual doors, has a fine arcade of four large arches, carried by massive Norman piers. This arcade was, however, blocked up to a height of some 10 feet by an original stone screen pierced with doors, part of which remains. The upper floor formed, perhaps, the private apartments. The windows are larger than those of the floor below. There is a mural gallery which is peculiar in not running all round, but only connects two or three windows at a time. The south half has traces of a large arch in its east wall, and was perhaps the chapel. Each half of the keep had its own roof, which was gabled and not flat, the cross wall carrying the gutter between them. On the north side, just above the roof, is a series of pigeon-holes. Round the summit of the keep, at the parapet level, but outside it, on the east and south sides, was carried a brattice. Three of the turrets are square in form; the fourth turret, that at the south-east angle, was undermined and thrown down during the siege of 1215. It was shortly afterwards rebuilt, but of circular form externally, instead of square. From the parapet walk upwards, however, it is carried up square on the inside, though still rounded towards the field. The traces of the rebuilding are visible internally the whole height of the keep. The-turret roofs must have been reached by ladders. All the floors of the keep were of wood, and the only vaulted apartments are the prison in the basement of the forebuilding and a small mural chamber in the north-west angle of the first floor. It must be strictly borne in mind that these Norman keeps were not residences, but merely used as a refuge in time of siege into which the garrison could withdraw, and that they

relied on its passive strength and their store of provisions and water to stand a protracted blockade.

The party then proceeded, under Mr. Hope's guidance, to the Cathedral Church. Here a halt was made before the west front to allow of the examination of mutilations and later insertions in the original rich Norman work. The front was originally flanked by two lofty turrets, terminating in pyramidal pinnacles like that still remaining at the south-west angle of the nave. The north turret was taken down, and partly rebuilt in feeble imitation of the original, at the beginning of the eighteenth century; the south one was more fortunate in escaping with the loss of the pinnacle; the north-west nave pinnacle had given way so long ago as the fifteenth century, and been replaced by an octagonal one of the style then in vogue. This has, however, lost its embattled top. The double tier of Norman windows, which once adorned the west end of the nave, was removed in the fifteenth century to make way for a large Perpendicular window of eight lights.

After inspecting the remains of the massive tower on the north side of the choir, erected by Bishop Gundulf about 1080, the party entered the church, where Mr. Hope proceeded to describe, by the aid of a huge ground-plan, the history and architecture of the building.

As Mr. Hope's observations, however, were entirely *vivâ voce*, he has very kindly compiled for this report the annexed Chronological Table, as calculated to give a clearer idea of the progressive works which eventually converted a small and humble building into the spacious church now covering its site, than a summary of his remarks.

Chronological Table of the Architectural History of Rochester Cathedral Church.

BY W. H. ST. JOHN HOPE, M.A., F.S.A.

1. A.D. 604.—Consecration of Justus, as first bishop, by St. Augustine, for whom a church of stone was built by Æthelbert, king of Kent. To this a college of secular canons was attached by Bishop Justus, and endowed by the king with "Priestfield" (which still belongs to the church) and other property.

No portion of this building is known to remain. Bishop Paulinus was buried in it in 644, Bishop Ythamar in 655, and Bishop Tobias

in porticu Sancti Pauli in 726. Probably a church of basilican type with apse at each end; the western one containing the high altar, and the eastern the altar of St. Paul.

2. *Inter* 1077-1080.—A strong tower of stone built by Bishop Gundulf (1077-1108) to the east of the old-English church, probably as a defensive work. Used as a bell-tower as early as the middle of the twelfth century. The lower portion remains on the north side of the choir.

3. *Circa* 1080.—The old-English church replaced by a Norman one by Bishop Gundulf, for the reception of Benedictine monks, introduced in lieu of the secular canons in 1082. The plan of this church was peculiar. It consisted of a choir and aisles six bays long, a very narrow transept, and a nave (left incomplete) of nine bays. There was no central tower, the one described above doing duty for it. As this stood detached in the angle of the choir and north transept, it was balanced by the erection of a smaller south tower built in the angle of the choir and south transept. Beneath the eastern two-thirds of the choir was an undercroft, the western half of which still remains, as also do four arches of Gundulf's south arcade of the nave and parts of his nave-aisle walls. Into this new church the relics of St. Paulinus were translated and placed in a silver shrine given by Archbishop Lanfranc. This shrine seems to have stood in a small chapel which projected from the centre of the east end of the presbytery.

4. Rearrangement of the choir and completion of the nave, perhaps by Bishop Ernulf (1115-1124) The west front and the diaper work in the triforium are of slightly later date than the arcades.

5. 1130.—Dedication of the church.

6. 1138.—Destruction of the church and monastery by fire. Extent of consequent repairs not apparent. Portion of the gable wall of the south transept seems to be of this date, and on the evidence of fragments of mouldings the work was executed by William the Englishman or his school.

7. 1179.—Second destruction of the church and monastery by fire. Extent of damage and repairs unknown. The outer wall of north choir aisle is, perhaps, of this date.

8. *Circa* 1190.—The lower part of the outer wall of the south choir aisle built as part of a new cloister by Bishop Gilbert de Glanville (1185-1214.)

9. *Circa* 1190.—Commencement of a central tower. Bases of the

piers laid, and of the adjoining arches into the aisles; and alteration of choir-aisles begun. The whole of this work, however, was only carried up a few feet.

10. *Circa* 1195.—Removal of the eastern half of the Norman undercroft and presbytery above it, and erection of the present undercroft, choir transept, and presbytery.

11. *Circa* 1220.—Rebuilding of the Norman choir by William de Hoo, sacrist, from offerings at the shrine of St. William of Perth (a Scotch baker murdered outside the city of Rochester in 1201, and canonized 1256). New choir first used in 1227. Most of the choir-fittings then inserted remain *in situ*. The eastern face of the *pulpitum* is of the same date. Part of the same work are the eastern piers of the tower, with the arch above, the arches into the choir-aisles, and the bay of the transept clerestory immediately over them. The "new work," *i.e.* that of the whole eastern arm, was roofed in and leaded by priors Radulfus de Ros and Helias.

12. *Circa* 1235.—The great north transept "*versus portam beati Willelmi*" and north-west tower-pier built. Begun by Richard de Eastgate, monk and sacrist, and almost completed by brother Thomas de Mepeham (sacrist in 1255).

13. *Circa* 1240.—Destruction of Bishop Gundulf's small south tower, and conversion of south choir-aisle into its present form. The upper part of the outer wall is of this work, but the curious lopsided wooden roof belongs to the later alterations of the south transept, *temp.* Edw. II.

14. 1240.—Dedication of the church by Richard de Wendover, bishop of Rochester, and Richard, bishop of Bangor.

15. Building of the great south transept (*alam australem versus curiam*) by Richard de Waldene, monk and sacrist. Also of the south-west tower-pier, the south, west, and north arches of the tower, and the two first bays of the nave.

16. Alterations to clerestory of south transept. Conversion from two arches into one of altar recesses on east side of south transept. Apparently *circa* 1320; for the altar of the Blessed Virgin Mary, which was in the south transept, is spoken of in 1322 as *de novo constructo*. Building of western side of *pulpitum*, and of screens in north and south choir aisles; also west cloister door, and door at west end of south choir aisle. The rebuilding of nave abandoned, and the junction of Norman and Early-Decorated work made good.

17. 1327.—Building of an oratory *in angulo navis*, and insertion of

the small door in the west front. This oratory was built, by agreement between the monks and the parishioners of St. Nicholas's altar in the nave, for the Reserved Sacrament.

18. 1343.—Central tower raised, and capped by a wooden spire, by Bishop Hamo de Hythe, who placed in it four bells.

19. Insertion of Decorated tracery in windows of presbytery. Query in 1344, when Bishop Hamo de Hythe reconstructed the shrines of SS. Paulinus and Ythamar of marble and alabaster. The beautiful door to the chapter-room is apparently of same date.

20. 1423.—Removal of the parish altar of St. Nicholas from the nave (where it had stood probably from at least Bishop Gundulf's time) to a new church built for the citizens in the cemetery on the north side of the cathedral church, called *Green Church Haw.*

21. Building of the clerestory and vaulting of the north choir aisle. Insertion of Perpendicular windows in nave aisles.

22. *Circa* 1470.—Great west window inserted, and the nave clerestory rebuilt with the north pinnacle of the gable.

23. *Circa* 1490.—Westward elongation of the Lady Chapel.

24. 1541.—Construction of the panelled book-desks in the choir for the use of the secular canons, singing-men, &c., substituted by Henry VIII. for the monks of the suppressed priory of St. Andrew.

25. 1591.—Destruction of "a greate parte of the chansell" of the cathedral church by fire.

26. 1664.—South aisle of nave recased.

27. 1670.—North aisle of nave partly rebuilt.

28. Rebuilding of north turret of the west front, and lowering of the south turret.

29. After 1779.—Partial demolition of the great north campanile.

30. 1826.—Reparation of the church, and recasing and raising of central tower by Mr. Cottingham.

31. 1850.—New font made.

32. 1872 and later.—Various repairs by Sir George Gilbert Scott.

At the conclusion of his remarks the party were conducted by Mr. Hope round the building, examining *en route* the monuments, plate, and crypt. A move was then made, by Canon Jelf's kind permission, to his garden, which occupies the site of the cloister of the monastery. It was here explained that the cloister, although doubtless originally placed by Bishop Gundulf on the south side of the nave, as was the

usual custom, was removed by Bishop Ernulf (1115-1124) to the south side of the choir. The chapter-house, dormitory, and fratry were his work, considerable remains of which still exist. The eastern side of the cloister, with its various doorways, and the west gable of the chapter-house, are fairly complete and fine specimens of Ernulf's work. On the interior and exterior of the west end of the chapter-house was pointed out the peculiar fretty diaper which characterises Ernulf's work at Canterbury. After inspecting some fine Norman responds which belonged to the common-house, or dormitory undercroft, recently uncovered by Mr. Hope in the Dean's kitchen-yard, the party proceeded through the Vines—once the vineyard of the monks—to Restoration House, which had been kindly thrown open for inspection by the owner, Stephen T. Aveling, Esq. This interesting building is said to have been erected about the year 1587. In ground plan it forms the letter E, the two outer projections forming wings, and the centre projection the porch. The house, constructed of red brick, has an oaken roof covered with red tiles. In the front there are fifty-two windows; for many years twenty-eight windows in the house were closed by the window-tax; fortunately the frames and in some cases the glass has been preserved. The frames are chiefly of oak, but some of moulded brick. The porch and the walls on each side appear to have been cased with a brighter coloured brick some fifty years after the erection of the building. On entering there is the hall on the right hand with the usual elevation or dais at the further end raised some six inches from the floor. Beyond is a southern wing, and at the back a drawing-room panelled with oak and having a handsome chimney-piece. The armorial bearings of the Baynard family were inserted in the centre of the mantel more than one hundred and fifty years after the mantelpiece was erected. The west or front room in this wing had tapestry which appears to have been especially made for it. Considerable alterations were made in the centre of the house about 1660. A large drawing-room or ball-room was added, likewise a new and wider staircase. In the northern or left-hand wing is the large and spacious apartment which, according to tradition, was occupied by Charles II. on the eve of his Restoration; hence the name as applied to the house. This room was panelled and decorated with black and gold, but a fire (luckily confined to this room) destroyed most of it. It has been repanelled with mahogany, and the present owner has painted it with seven subjects from Tennyson's "Enid." The borders

of the pictures are black and gold, and the designs are taken from carvings in the house. From this room is a secret passage leading through a panel, which communicates with the roof and with the basement; from the latter is an underground passage which leads in the direction of the river. Among the owners of this interesting building the first appears to be Nicholas Morgan, who conveys it to his daughter Grace and her husband, Henry Clerke, of the Middle Temple, 5 Dec. 5th James I. Sir Henry, as he afterwards became, was a Royalist, and was succeeded by his son Francis, who was knighted by Charles II. In 1693 the property was transferred to the Bokenham family.

The Bukenhams or Bokenhams came from Norfolk and Suffolk. Captain William Bokenham is presumed to have belonged to this family. He was appointed lieutenant of the "Kingfisher" in 1682, and in 1702 he took part in the attack on Vigo, where he was ordered against a battery of seventeen guns defending the harbour, which service he conducted, says Lediard, with the spirit and gallantry which formed the leading traits in his character, and completely silenced the enemy with the loss of only two men. He did not long survive the credit he then acquired, as he died in the Novemberf ollowing, viz. in 1702. He could have been but for a short time occupant of Restoration House and M.P. for Rochester, as he was elected in the room of Sir Cloudesley Shovel to the Parliament of 13th William III. which met Dec. 30, 1701, and was dissolved July 2, 1702 (Sir Cloudesley

Shovel was again elected in 1705). Captain Bokenham was buried at St. Margaret's church, where there is a flagon given by him and bearing his name with coat of arms. He had a brother, likewise a

NOTE.—We are indebted for the loan of this illustration, together with that of Restoration House, to the kindness of Henry Maudslay, Esq. M.I.C.E.

sea-captain, who died in 1707 on board his vessel the Augusta, which he had captured from the French; and another brother, Harry Bokenham, became owner of Restoration House, whose daughter Ann wife of John Dumaresque, sold the moiety of the house to one Henry May. Whiston, the astronomer, lived here, and Charles Dickens, as we shall see, was an appreciative visitor.

There is an interesting reference to the house to be found in the works of the great diarist of the seventeenth century. On June 30, 1667, Mr. Pepys visited "Sir F. Clerke's house, which is a pretty seat, and went into the cherry garden, and here met a pretty young woman, and I did kiss her." In Dickens's "Great Expectations" Restoration House is called "Satis House." In chapter xxix. it is described, "I had stopped to look at the house as I passed, and its seared red brick walls, blocked windows, and strong green ivy clasping even the stacks of chimneys with its twigs and tendons as with sinewy old arms, made up a rich attractive mystery." On the occasion of the great novelist's last visit to Rochester on 6th June, 1870, he stood in front of Restoration House leaning on the fence for a long time, and it was supposed that the next chapter of "Edwin Drood" (alas! never to be written) would have had reference to the house.

There are a few good pictures preserved; one by Vandyck of Charles II. when a youth; likewise a painting of the Crucifixion, which Mr. J. Green Waller describes as an undoubted work of the Flemish school late in the fifteenth century. It has all the character of Lucas Van Leyden, and is possibly painted by him, and is a valuable example of the early school of oil-painting.

The house also contains a large quantity of old oak and Chippendale furniture, and more than forty carved oak chests and coffers. The paintings in the newly panelled room to which reference has been already made, and which fully justify the encomium passed upon them by Mr. Roach Smith, are in seven panels, and may be described as follows:—

No. 1 is the meeting of Enid and Geraint.

> "Here, by God's grace, is the one voice for me."

2nd. The reception of Enid by Queen Guinevere.

> "Embraced her with all welcome as a friend,
> And did her honour as the Prince's bride."

3rd. The misunderstanding.

> "O purblind race of miserable men,
> How many among us at this very hour
> Do forge a life-long trouble for ourselves
> By taking true for false, or false for true:
> So fared it with Geraint."

4th. The journey and meeting three robbers.

> "And down upon him bare the bandit three."

5th. The journey. Encounter with other villains. Geraint wounded.

> "And her desolation came
> Upon her, and she wept beside the way."

6th. The wounded Geraint in the hall of Earl Doorm. The insult of Earl Doorm. Geraint rises, and Earl Doorm dies "by him he counted dead."

7th. The happy finish. Enid and Geraint riding home.

Before leaving the house the visitors were indebted to Mr. and Mrs. Aveling for refreshments, which were served upon the lawn.

The members and visitors next assembled at about 4 o'clock at Mr. Humphrey Wickham's, at Strood, and, having been most hospitably received in the shady entrance to the garden, Mr. Roach Smith said :—"I shall endeavour, as far as possible, to give you some notion of the Roman and Saxon sepulchral remains exhibited by Mr. Wickham; and then we will survey the site; and, understanding what it must have been in the time of the Romans, see what it now is.

This group of Roman fictile vessels of such a variety of shapes were with the cinerary urns, most of the burials of the Romans having been by cremation. The armillæ, fibulæ, beads, and other ornaments and toilette utensils, including the Medusa's head carved in jet, were from various interments with the pottery and coins, of which several hundreds were secured, the latest being of Gratian. Preceding Vespasian there are but few; of the Antonines and Faustinas many; and many also of Carausius, Allectus, and the Constantine family.* It is seldom that individual coins from such sources are of excessive rarity

* A descriptive catalogue is published in the *Numismatic Chronicle*, vol. ii. p. 112 *et seq.*

or present novelty of type; but one of these demands special remark, as it was then not only a new example (another has since been found), but it affords historical information. It is a legionary coin of Carausius, inscribed, round the figure of a capricorn, to the twenty-second legion, surnamed *Primigenia*. Mr. Akerman expressed doubts whether these legionary coins of Carausius could be depended upon beyond those recorded legions known to have been permanently quartered in Britain. But as the others refer to legions stationed in Germany, this among them, it is very probable that detachments from them were brought into Britain by Carausius.*

As excavations for houses were made more towards the west, the cemetery of the Saxons was divulged, closely contiguous to that of the Romans. This proximity of the burial-places of the two distinct peoples, so long enemies in life, has great significance in the historical accounts of the settlement in Britain of the Teutonic tribes. It tends to imply that it was more gradual and peaceable than is commonly believed. At all events, inimical feelings seem to have been extinguished by the great pacificator, Death.

The swords, spears, and umbos of shields call for no particular remark, as the types are common; but a small bronze coffer or box is of the greatest rarity and interest, as it is stamped with designs of scriptural subjects, the nimbed Saviour seated, with two figures on each side, being conspicuous. It is probably of the sixth or seventh century, possibly a little earlier. Christian representations of this early date are of unusual occurrence in this country; and I know of no other instance of such a coffer from Anglo-Saxon cemeteries.†

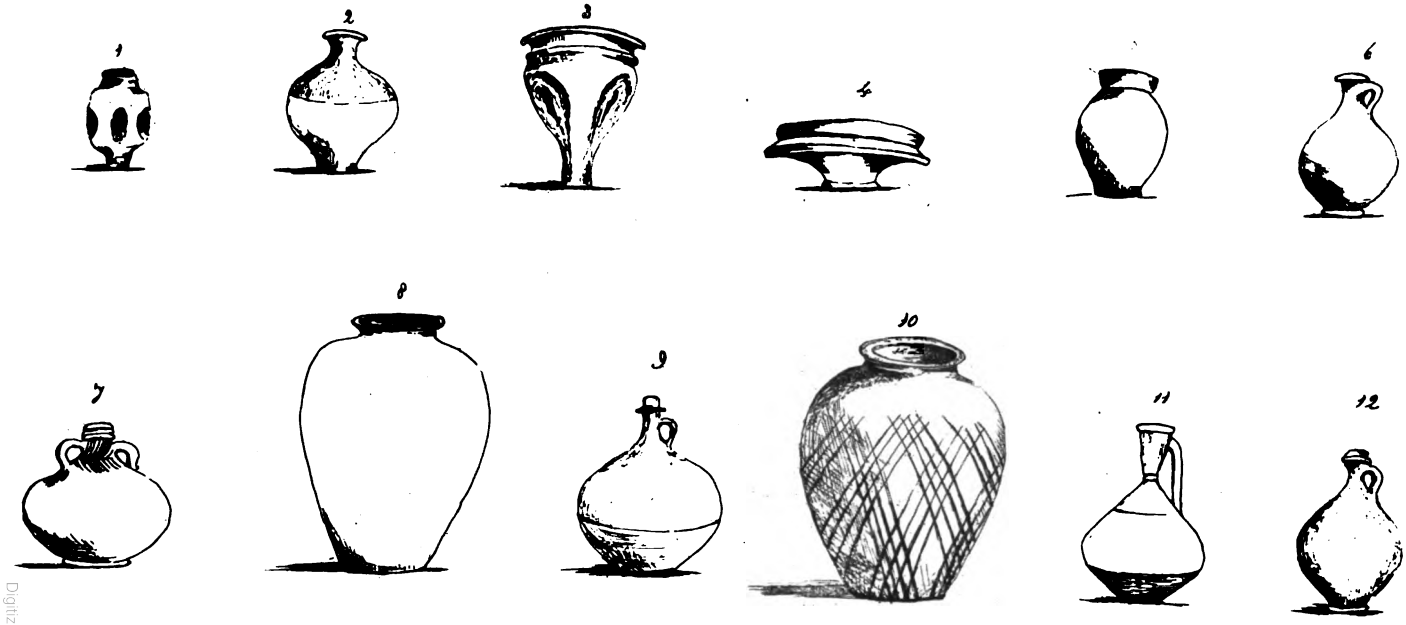
The barbed iron weapon is also of extreme rarity. It is the *Angon* described by Agathias, a writer of the time of Justinian, in speaking of the arms of the Franks. To Mr. W. M. Wylie we are indebted for the first recognition of this weapon, of which he published an engraving and an admirable account of the *Angon*.‡

The collection of the Roman potters' vessels, extricated from the bed of the creek opposite the Upchurch Marshes, gives a good notion of the general character of the ware made in that district. From the

* A detailed account of these discoveries, with plates and map of the site, will be found in *Collectanea Antiqua*, vol. i..

† It is engraved in *Collectanea Antiqua*, vol. ii. pl. xxxvi.

‡ *Archaeologia*, vol. xxxvi. Mr. Wickham's example is engraved, together with the other contents of the grave, in *Collectanea Antiqua*, vol. v. pl. xi.

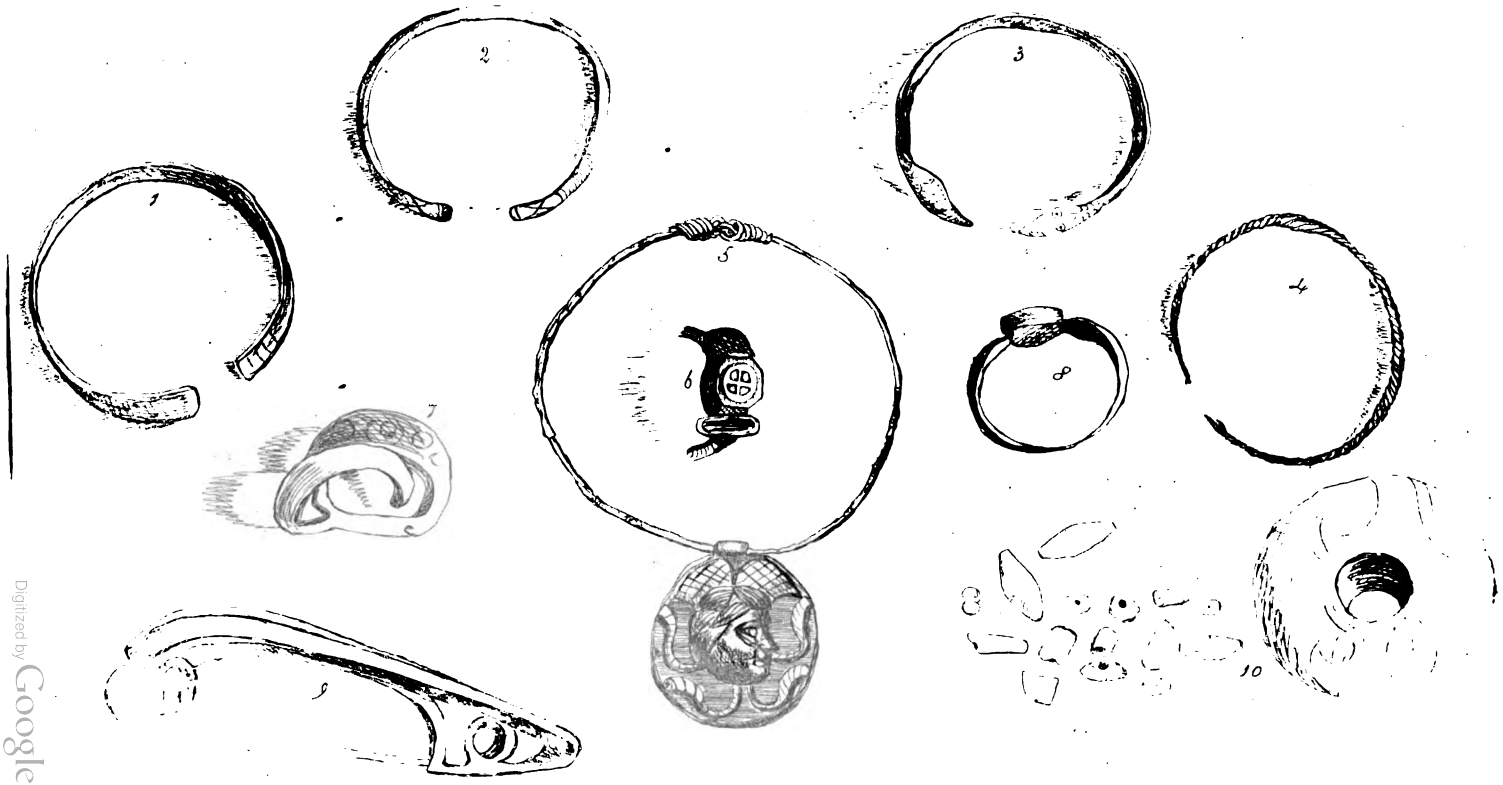


ROMAN URNS & VASES FOUND AT STROOD IN KENT.

H.W. del. & sc. sculp.

IN THE POSSESSION OF Mr H. WICKHAM

SEPULCHRAL URNS FOUND AT STROOD IN KENT.



1, 2, 3, 4, 5, half size
6, 7, 8, 9, 10, full size

prevalent bluish-black colour and peculiar ornamentation it is commonly spoken of as "Upchurch ware," and is recognised all over England; the inference being that it was exported from the extensive establishment on the banks of the Medway.*

I now direct your attention to the past state of the banks of the Medway as revealed by these important discoveries, and their present condition, which you have an excellent opportunity of understanding from the evidence of your own eyes as regards Strood. Since the days of the flourishing Roman potteries the Medway has been allowed to flow over and destroy hundreds of acres of rich pasture and arable land, and at high water wholly to submerge the sites of the potteries. This encroachment led to the discovery of the potteries; for, the newly-formed creeks intersecting them, the remains were, in all directions, exposed to view and easily secured. This process is still going on; and now, especially for the last ten or twelve years, the increased rise of the water covers periodically the site of the Roman and Saxon cemeteries you see before you; and the houses you see yonder are filled to the depth of from three to five feet of water for days. The inhabitants have to be fed by means of boats; and boats ply in the High Street of Strood. The land upon which you stand, of course, is also covered, Mr. Wickham being one of the many sufferers. You can scarcely realise that, at the present day, such desolation should be sanctioned in a rich Cathedral town, the Dean and Chapter having held the land, the neglected bank of which has contributed so much to the evil. This scourge, inflicted by the passive hand of man, would be horrible did it end in turning comfortable habitations into reservoirs of dirty water for long days and nights; but the calamity is increased by the nature of the stagnated water. It has percolated through an undrained place; has impregnated itself with the contents of drains, cesspools, and privies; and in this fetid state it remains in the houses not merely for days, but for ever. The effects are never got rid of from the cellars, not only of the houses you see, but from those of Strood itself. It is not only the sacrifice of property and comfort, but it is the infliction of disease and death. Had the warnings and teachings of Archæology been listened to, these awful visitations would have been prevented. We are in the face of further and yet more

* A map and view of the locality, together with examples of the ware, will be found in *Collectanea Antiqua*, vol. vi.

serious inundations; and I call upon you, individually and collectively, to aid us in procuring a Parliamentary Commission of Inquiry to stay the further progress of this dreadful evil."

Mr. Alfred White, F.S.A., remarked :—The height to which the tide flowed up the river Medway at the time of the Roman occupation and that attained at the present time may vary from several circumstances. First, the configuration of the shores of the whole district bordering on the rivers Thames and Medway has undergone great change from the washing away of the clay and chalk cliffs on the Kentish and Essex shores. The Isle of Sheppey extended in the Roman period a mile or more to the north, and the same may be said (perhaps not to so large an extent) of the shores of the Kentish mainland about Herne Bay and Reculver, and of the cliff of the Isle of Thanet. These additions to the land would tend to throw the rising tide much more to the northward into the German Ocean, and would hinder its taking the course into the mouth of the Medway. Another great alteration would be caused by the silting of the channel which existed then between the Isle of Thanet and the mainland between Richborough and Reculvers, and along which the whole of the then navigation passed and through which a large portion of the tide from the German Ocean must have flowed, and thus be diverted from the mouths of the Medway and the Thames.

Secondly, the alterations in the bed of the Medway by dredging, &c., for the improvement in access for large ships to the dockyard of Chatham must enable the tide to run up the river with less check to its force, and, so far as the locality of this cemetery is concerned, we must not forget the greatly increased water-way under the bridge between Rochester and Strood by the erection of the present structure, in place of the old bridge with its many narrow arches. This alteration must allow the tide to rise higher above bridge, especially at spring tides, and cause the water to come with greater force up the creek, by the bank of which we now stand. The changes in the coast-line at the mouth of the river would have caused the alteration in the extent to which the water covers the old Roman pottery works at Upchurch, Bishop's Island, &c., and this has been made more destructive in recent times on the site of the cemetery by the greater water-way under the bridge. A considerable if not a perfect cure to this sad state of things can easily be effected by placing a dock-gate

where the creek passes through the railway embankment, and this inexpensive step should be taken, though it may interfere with present rights in the creek. Any such rights surely could and should be promptly settled by a wealthy corporation even by compensation, and the inhabitants of this afflicted district be relieved from its degradation by the filth which now not only makes their lives miserable, but which tends to engender disease, and constantly keeps them in a condition to receive and disseminate any deadly malady that may appear in the district. Such neglect would not have afflicted the tenants of this now submerged cemetery. Their Roman governors would have soon secured their comfort, had it been even by the erection of one of those noble embankments for the benefit of which we have to the present day to be thankful.

It may not be without use to contemplate the old tradition of the great sinkage on the east coast of Kent, and the recent tremblings in the neighbouring county of Essex should lead to a review of levels so carefully taken during our grand Ordnance Survey. Is it possible that changes of level may have taken place in the eleventh century in this part of Kent, and in some part account for the submerging of these ancient works of the Romans?"

Mr. Wickham's collections include, moreover, two large groups of bronze celts, and fragments of bronze swords and implements found in the hundred of Hoo.

Roman sepulchral remains, including a very elegant bronze vessel, discovered at Luton, near Chatham.

A unique small brass coin of Allectus, found at Higham. It is of the common galley type; but upon the galley, in the midst of the rowers, stands Victory, holding a wreath in her right hand and a palm-branch on her left arm.

A very complete set of tradesmen's tokens of Chatham, Rochester, and Strood, of the seventeenth century.

Mr. H. W. Wright, of Grove Villa, Frindsbury, exhibited a folio volume of seals, and some deeds, the property of Hasted, the Kentish historian, which had descended to his own family. The book of seals is well bound and in good preservation. Inside the cover is inscribed, "Joseph Oliver, Hollingbourne" (to whom it was given by the son of Hasted), and the seals (in red wax) are preceded by these words: "The following Seals were the collection of the

famous John Evelyn, Esqre, author of the 'Sylva,' etc., and one of the first Promoters and Fellows of the Royal Society. They were given to me by the family.—E. H., 1765."

The first part contains about 200 impressions of antique gems chiefly; the nature of the stones, and from whom Evelyn obtained the impressions, being usually marked underneath. Many are of great artistic merit. Some are of modern work, and generally described as such, as, No. 10, "The Lord of Downes," cut by Symonds; Nos. 21 and 24, "These belonged to Mr. Roquinby, The Cow sold for 10*l.*"; No. 66, "My Own," by Mr. Rawlins, Paris, 1650; No. 91, "Jupiter Hamon, is antique, in a very fayre onix. Dr. Bistane brought it out of Italy and gave it to Endymion Porter."

Then come cyphers, crests, and arms, many being marked as cut by Symonds* in London and Rawlins in Paris. They are briefly noted, as, *ex. gr.*, No. 246, Cecil, Secretary of State to Queen Elizabeth. No. 266, Secretary Nicholas. No. 263, My own, by T. Rawlins, Paris, 1650, in steel. Sir Richd. Browne and Browne and Evelyn. No. 303, Brother Richd. Evelyn. Simons's cutting. From No. 304, Arms of Nobility and Gentry; some foreign. Page 13, Gentry; one by Simons. Page 14, Gentry. Cousin Park of Virginia; Sister Draper. At No. 481, "Here ends the collection of John Evelyn, Esq., F.R.S."

Then is inscribed, "The following seals are mostly belonging to the acquaintance and correspondents of me, E.H."

They number 122, and include Brian Faussett, A.M.; Boys of Sandwich; John Hinde, Att^{y}. Milton; Edm^{d}. Barham, of Dover; John Carter, Esq. of Deal; Bathurst, of Horton, Kent; Oxenden, of Broome, 1771; Joseph Brook, Rochester; Thomas Harris, of Barming, 1767.

Then follows another series of 621 of the seventeenth and eighteenth centuries. Among them is a fine antique head, found at Aldborough, in Yorkshire, 1732; a mediæval *Sigillum Amoris*, found at St. Albans, and many more worth examining. At the close is written, "Here ends the Seals collected by Edwd. Hasted, Esq., Historian of Kent."

The remaining seals, 29 only, and book-plates, are marked as collected by Joseph Oliver, of Hollingbourne.

About a dozen deeds on parchment, *temp.* Edward III. to Henry VIII., relating chiefly, if not wholly, to lands at Hadleigh, in Suffolk.

* Simons, the celebrated coin and medal engraver.

Deeds, of the seventeenth century, relating to property at Chatham, Hollingbourne, Cowstead, and Newington, in Kent.

Documents relating to the family vault of the Hasteds at Newington.

Copy of the will and codicil of Hasted the historian, with directions for his funeral, and will of his son, the Rev. Edward Hasted.

THE STROOD CHURCHWARDEN'S BOOK.

(Exhibited by Mr. Wickham.)

First entry, page 7.

"Here folowh all sych goods & sms of money as belongh to the chyrche of Strood & in wose hands they be in."

Page 2, A° 1555.

"The acmpt mayd by Edward Week & Rogr Cranchs, chyrchwardens of Strood, gevyn befor the pareche the xxiiij day of may & in the fyrst & second year of the Reyn of Kyng Phylyp quen Mare."

This volume contains much curious matter relating to local customs and habits, and is quite worthy of being published; if not wholly, at least in abstract.

Mr. E. W. Brabrook, F.S.A., as one of the Vice-Presidents of the Society, asked, before the members separated, to say a few words in order to express the sense which the Society felt of the kindness with which they had been received by Mr. Wickham, the gracious hospitality which he and the Misses Wickham had extended to them, and the interest which all present had taken in the remarkable collection of antiquities which had been laid before them. Few things were more gratifying to the London antiquary than to find, in an ancient town like Strood, gentlemen like Mr. Wickham who reverenced its past history and watched over the relics of antiquity which from time to time were discovered. He begged leave to propose a hearty vote of thanks to Mr. Wickham, and on the part of all his guests to wish him long life and prosperity in Strood. At the conclusion of these remarks, which were fervently acknowledged, the party separated, the majority adjourning to dinner at the King's Head, Rochester, where a pleasant hour or so was spent under the genial presidency of Mr. C. Roach Smith, V.P.; the company was numerous, and, as the evening train to London had to be considered, there was but little time for speech-making. The Chairman, however, who was supported on either

side by Mr. W. H. St.John Hope, F.S.A., and Mr. Alfred White, F.S.A., in a few happy observations briefly reviewed the proceedings of the day, submitted the toast of the "Constitution under which we are receiving so many blessings, the London and Middlesex Archæological Society included," which was warmly received, and proceeded to a general review of the work undertaken by the London and Middlesex Archæological Society, expressing his gratification that, after so many years of usefulness, its members had thought it well to organise a visit, for the purpose of comparison, to some of the many interesting localities situate in the sister county of Kent. Associated with the Society as he was, he was pleased to welcome it, and in wishing it continued and increasing prosperity he would couple with the toast the name of its Secretary, Mr. John E. Price, F.S.A.

Mr. Price, in responding, thanked Mr. Roach Smith for the observations he had so kindly made, and the company generally for the way in which they had been received. He said that, connected as Mr. Roach Smith was with all appertaining to London archæology, his career in the past and his association with the Society, a body whose very existence was in a measure due to his past labours in the cause, it had been thought that it would prove an acceptable suggestion to the members generally if an opportunity was afforded them of visiting the locality where their friend and Vice-President resided, and induce him to preside over the proceedings of the day; that the suggestion was cordially adopted was proved by the presence of so large a gathering, Mr. Price remarking, that, although he had attended the majority of the county gatherings since the foundation of the Society, seldom had he seen so large an attendance as the present. He observed, that they were largely indebted to their Chairman, likewise to Mr. Hope and others, who had contributed to the enjoyments of the day. There were, doubtless, some who considered that an excursion in connection with the Society should be confined to its local area, but he considered that, having in view the number of the places visited, and that the majority of these were in the county and had been well and fully illustrated in the Transactions of the Society, it was fitting and desirable that its members should encourage occasional visits to kindred objects of interest in adjoining counties, seeking for further knowledge, and by comparison and careful observation of what they saw they would be the better able to appreciate and comprehend the antiquities of their own.

The Chairman proceeded to remark upon the gratifying presence of certain members of kindred Societies. There was the British Archæological Association, represented by its Treasurer, Mr. T. Morgan, F.S.A.; the Royal Archæological Institute by Mr. R. S. Ferguson, F.S.A., who however had been compelled to leave early, having been announced to read a Paper that evening at the Society of Antiquaries of London; and Mr. William Henry King, Honorary Secretary of the Essex Archæological Society, who also had been obliged to go, owing to the difficulty in securing the cross railway trains. He congratulated the Society on the presence of these gentlemen; and, in asking the Company to drink to the health and success of these Societies respectively, he would couple with the toast the name of Mr. Morgan.

Mr. Thomas Morgan, F.S.A., Honorary Treasurer of the British Archæological Association, said: As Mr. Richard Ferguson of the Cumberland and Westmorland, and Mr. H. W. King of the Essex Archæological Societies have had to leave us, it devolves upon me to thank Mr. Roach Smith for the kind manner in which he has just spoken of the kindred societies who are all working in the same cause as the London and Middlesex Society, by whose invitation we are here to-day. I need hardly say that our cause is that of obtaining and storing up information as to the past from actual and contemporary evidence, and disseminating it for the general good. No man has been more instrumental in forwarding this work than Mr. Roach Smith, whose name is a "household word" in connection with Romano-British antiquities, and who was one of the first and principal promoters of the British Archæological Association, a society which by visiting the various counties of England did that which the Society of Antiquaries, who do not travel out of London, could not then do; and since that time we have seen Archæological Societies and Field Clubs established throughout the length and breadth of the land with excellent results. I cannot give a better instance of the expansion of the popular mind towards the study of our past history than the fact that the Magna Charta of King John, printed in exact fac-simile with a translation into English, has been selling about the streets of London for the small sum of a penny a copy, and finding plenty of purchasers. This could not have happened when Mr. Roach Smith began the work which through so many years he has conducted, through evil report

and good report, both in printed books as well as by word of mouth; and what he has told us to-day in Mr. Humphrey Wickham's house at Strood forms in substance, if a contrast, yet an analogy with one of the articles in that Magna Charta to which reference has been made. We were looking towards the Medway, over a large space of land which once was used as a burial-ground by the Romans and Saxons, high and dry, for they knew the spots to select; and one of Mr. Wickham's rooms was filled with Roman and Saxon sepulchral remains found there. Mr. Roach Smith explained how that now, through the scour of a creek, which runs in from the main bed of the river, not far above Rochester Bridge, the waters at high tides are brought up through this creek, and are spread all over this land stretched out before us, periodically bringing dismay, disease, and death to the villagers scattered over this tract, and sometimes even up to Mr. Wickham's house and the High Street of Strood. This might be checked by a lock or dyke, as suggested by Mr. White, and surely such a work ought not to be neglected. The Romans certainly would have carried it out if necessary.

King John apparently used to embank rivers or dam them up for his own purposes, whether for defence or recreation; and one of the articles in the Magna Charta was an agreement by the king to do away with such works when they interfered with the public good.

On whatever authorities has now devolved the care of such works no time should be lost. Mr. Roach Smith has long pressed upon public attention the prevention of these continued inundations. Let King John's undertaking for the public good be imitated in our own day for a useful public work, not by blocking up the stream of the river but by works to prevent its overflow.

We have had to-day a most interesting visit to this ancient cathedral city, not a little heightened by the pleasure of seeing our old friend Mr. Roach Smith as active as ever in mind and body, and at home in the midst of the Roman and Saxon treasures at Mr. Wickham's, dug up in sight of his own "Temple Place" at Strood.

Mr. E. W. Brabrook, F.S.A., with the permission of their chairman, submitted the next toast. He said that it was one which, having regard to the great services rendered by the objects of it, was among the most important toasts of the evening. It was the health of those who had taken part in the proceedings of the day, and especially

of his friend, Mr. Hope, who with his fulness of knowledge had taken them through that grand old city, and imparted some of that abundant knowledge which he possessed of the ancient Cathedral church and other objects of interest. At that period of the evening the utmost he could say would fall far short of Mr. Hope's merits, and therefore without further preface he would request them to drink Mr. Hope's health.

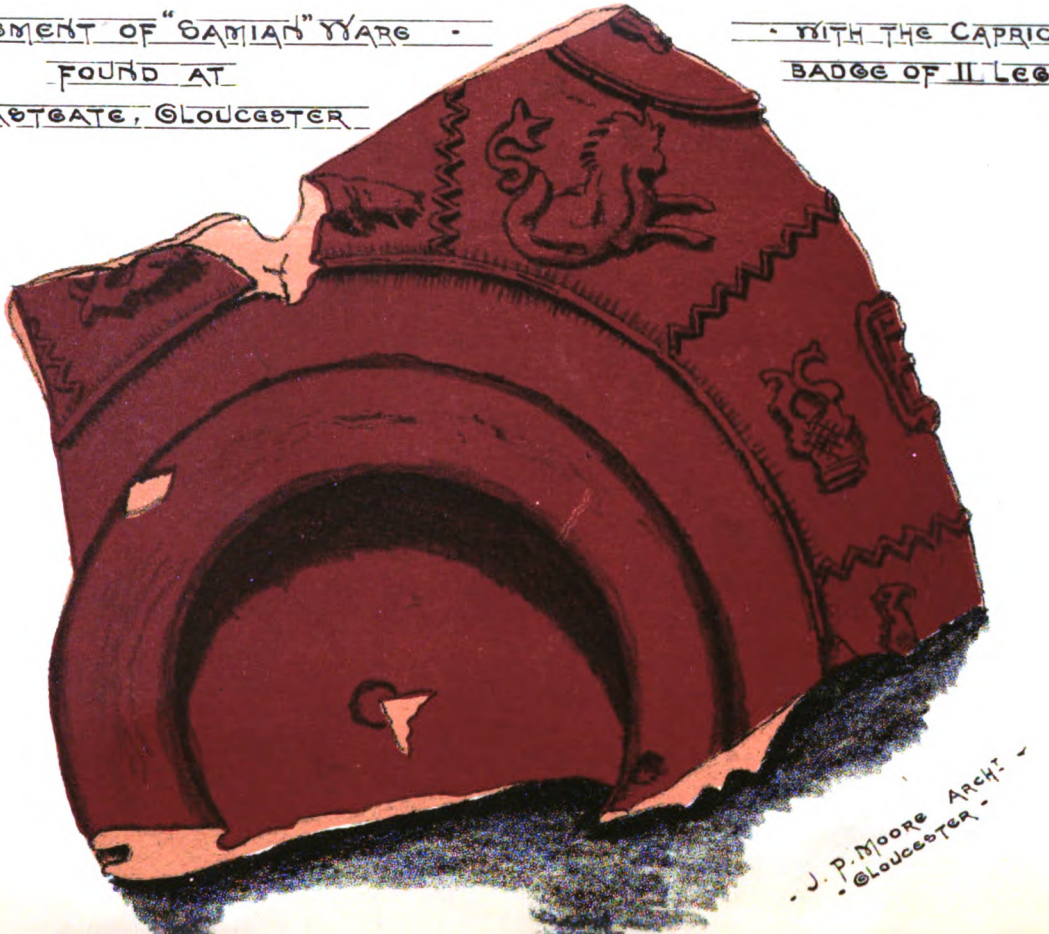
The toast having been suitably acknowledged,

Mr. A. White, F.S.A., rose, and said that the time had arrived when this pleasant meeting must separate to allow time to reach the train for London. Before they parted they had a duty to perform in which every one present would cheerfully join. This delightful day of pleasure and instruction had been promoted, planned, and presided over by one to whom every antiquary and lover of the history of his country was very deeply indebted. In his early days our chairman was foremost in organizing such meetings as had been held to-day; and in this way, as well as his private explorations, and the liberal manner in which he laid before the world the printed record of his toil—"The Text-Books of Roman Archæology"—he had well earned the title of a great Archæological Pioneer and the cheerful director and assistant of its students. "May health and strength," said Mr. White, "enable Mr. C. Roach Smith to continue his valuable researches, and to join his friends in these and similar gatherings."

Mr. White's observations were most cordially received; and, the toast having been enthusiastically drunk and acknowledged, the meeting separated.

FRAGMENT OF "SAMIAN" WARE
FOUND AT
CASTGATE, GLOUCESTER

WITH THE CAPRICORN
BADGE OF II LEGION



ROMAN POTTERY-KILN FOUND AT CAISTOR, NEAR YARMOUTH.

BY MR. JOHN GUNN.

A ROMAN pottery-kiln at Caistor, near Yarmouth, was accidentally brought to light in 1851, in a sand-pit on the farm of Mr. Daniels. It was on the south side of the church, and between it and the marshes, a few hundred yards from the fields adjoining the church, where an abundance of Roman remains, pottery, and coins, and a vault, described by the late Rev. Thomas Clowes, were discovered about that time, and also remains of coffins in a field on the opposite side of the road leading from Caistor to Ormsby, near the Mill.

My attention was called to the kiln by the late Mr. Panchen, carpenter, a most assiduous and successful collector of antiquities. It was laid bare on the falling down of the sides of the pit, and consequently various sections of it were exposed from time to time. That drawn by Mr. Winter appears to represent an earlier face of it than was presented when I had the good fortune to view it. Then two ledges of same material, namely clay roughly worked by the hand, which composed an outer casing of it, were exposed; and blue coloured urns were partially seen still standing on the ledges which supported them, within the kiln. There is no appearance of these ledges in Mr. Winter's drawing, but fragments of the kiln are lying at the base, which had fallen down, about 5 or 6 feet from the bottom of the pit. These consist of red and white, or light coloured, clay, of which some specimens were preserved by myself, and one by Mr. Winter with a finger-mark, proving the work to have been done by the hand. It was late one Saturday evening when I saw it, and on Monday morning following the entire kiln, or rather the remainder of it, had fallen down, and fragments of urns, all contorted more or less, were lying on the ground. Together with these was an iron stand tinged with the soil of the sides of the kiln. On shewing this to the late Mr. James Mills, a distinguished antiquary well acquainted with the working of pottery, he pronounced it to be a stand on which the unbaked and undried urns were placed.

I beg to call your attention to the description given by Mr. Artis, and referred to by Mr. T. Wright in his invaluable work on the *Celt, Roman, and the Saxon*, p. 212, who says that the Roman potteries at Castor (Durobrivæ), near Peterborough, in Northamptonshire, have a peculiar interest, from the circumstance that Mr. Artis' researches were rewarded by the discovery of the potters' kilns, and that he was thus enabled to investigate the process of the manufacture. This we shall best be able to describe in his own words, giving in an accompanying engraving a sketch of one of the kilns as it appeared when uncovered. One of these kilns, discovered in 1844 at Sibson, near Wansford, Mr. Artis described as follows: "This kiln", he says, "had been used for firing the common blue or slate coloured pottery, and had been built on parts of the site of one of the same kind, and within a yard and a half of one that had been constructed for firing pottery of a different description. The older exhausted kiln, which occupied part of the site of that under consideration, presented the appearance of very early work. The bricks had evidently been modelled with the hand, and not moulded, and the workmanship was altogether inferior to that of the others, which were also in a very mutilated state; but the character of the work, the bricks, the mouths of the furnaces, and the oval pedestals *which supported the floors of the kiln*, were still apparent. The floors had been broken up some time previous to the site being abandoned, and the area had then been used as a receptacle for the accumulated rubbish of other kilns."

"During the examination of the pigments used by the Roman potters of this place", Mr. Artis continues, "I was led to the conclusion that the blue and slate coloured vessels met with here in such abundance were coloured by suffocating the fire of the kiln at the time when the contents had acquired a degree of heat sufficient to ensure uniformity of colour. I had so firmly made up my mind upon the process of manufacturing and firing this peculiar kind of earthenware, that for some time previous to the recent discovery I had denominated the kilns in which it had been fired *smother-kilns*."

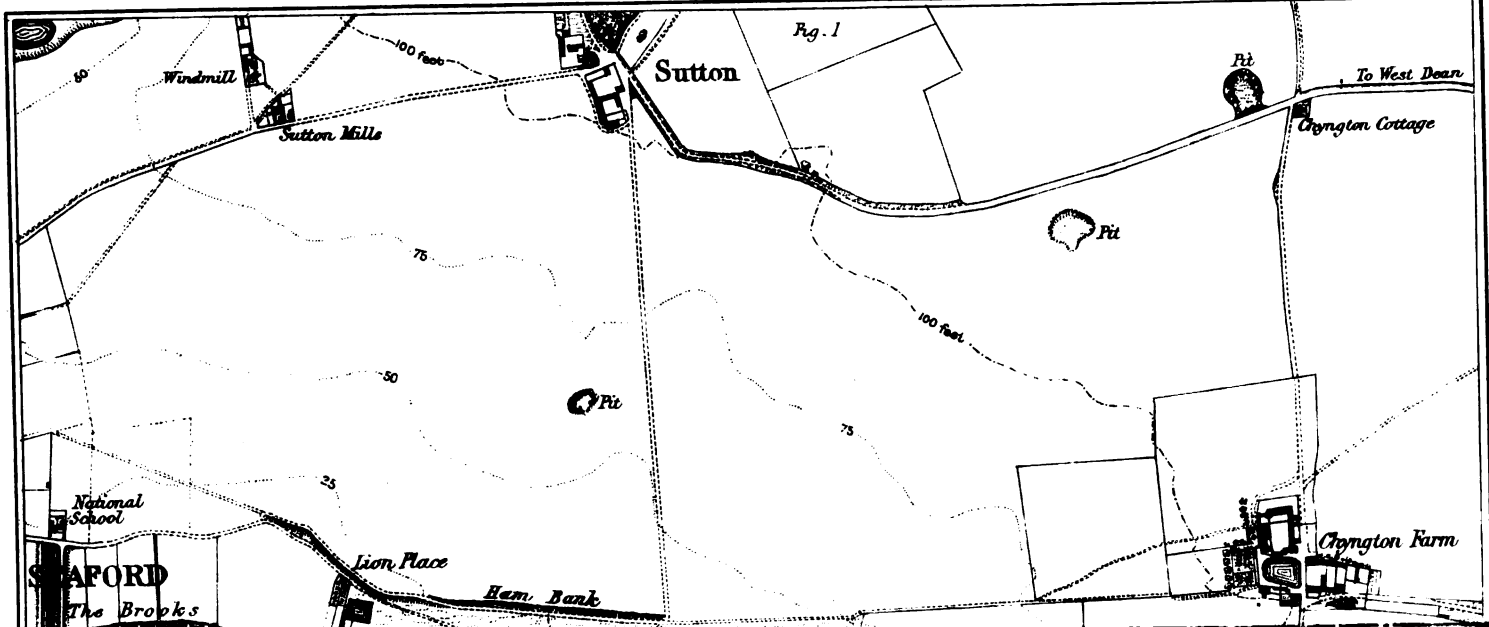
The kiln at Caistor, near Yarmouth, measured about 4 ft. square, and was gathered in more above when I saw it than is represented in Mr. Winter's drawing. I have no doubt

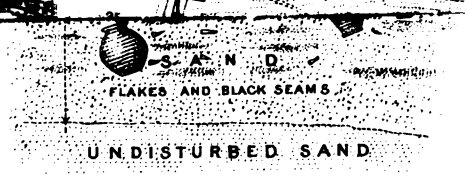
of the extreme accuracy of that artist's work, of which I am assured by long experience, and that the difference in our observations is due to his having seen an earlier section of the kiln. I regret that from the lateness of the hour when I saw it standing, and from its having fallen down before my next visit, that I had not an opportunity to examine its construction nor the precise mode of firing it. It is Mr. Winter's impression that it was heated as a baker's oven, and that the pottery was then placed in and the furnace closed, so as to constitute a smother kiln. The finding of the iron pottery stand, and the imperfect and contorted and calcined urns seems to indicate the appearance of an old dismantled kiln, such as is above described.

It is well known that the practice of cremation[1] ceased about the end of the fourth century, on the introduction and prevalence of Christianity, and humation was substituted. It is an interesting fact that, together with an urn containing calcined bones, several fragments of coffins with unburnt human bones were found in a clay pit near the mill, north-east of the church, as I mentioned in a paper entitled "Icenia".[2] Hence it arises that the most ancient Roman coins are found at the camp at Caistor, which preceded the winter camp at Burgh; but still an admixture of the later coins of Constantine is found, though less numerous at Caistor. I send some coins collected by myself at Caistor, together with some collected by Mr. Winter. They bear out the accuracy of my remarks on the date of the two camps, which appear to me to have combined to form the Garianonum, the site of which has been long the subject of discussion.

The specimens exhibited by the author were an iron pottery stand, a calcined fragmentary urn from the kiln, portions of the clay walls of the kiln, one of which, sent by Mr. Winter, bears the impression of the hand or finger, with a drawing of the kiln by Mr. Winter and some coins from Caistor.

[1] "Roman Kiln and Urns found at Hedenham, near Bungay", by the late Rev. S. King, *Norfolk Archæology*, vol. vi, p. 149.
[2] *Archæological Journal*, vol. iii, p. 246.





SECTION IN CEMETERY

1. Trench first opened.
2. Dug to 6 feet - nothing found.
3. Three Urns.
4. Black Plateau - fragments of pottery, scrapers.
5. Several black patches.
6. Three Urns.
7. Nothing found.

PLAN OF CUTTINGS IN CEMETERY

J.P. & W.R. EMSLIE, LITH., LONDON

SEAFORD, SUSSEX.

Notes *on the* Romano-British Cemetery *at* Seaford, Sussex. By F. G. Hilton Price, F.G.S., F.R.G.S., and John E. Price, F.S.A.

[*From the* Journal of the Anthropological Institute.]

By the kind permission of Mrs. Harison, of Sutton Place, and of the Rev. John Harison, Vicar of Bishopstone, we have been allowed to excavate the plot of raised ground near Seaford, commonly known as the Warren, and which has long since been pointed out by tradition as marking the site of a Roman cemetery. The position is so described upon the Ordnance map, and may be identified as being situate on Ham Bank, and defining, as it were, the boundary of an ancient trackway or road known as Green Street, which, starting from near the houses in Lion Place, may still be traced to the ancient property of Chyngton, or Chinting Manor, situate about a mile to the east of Seaford. Almost facing the cemetery another path or roadway may be observed. This is at right angles with Green Street, and runs in a direct line to Sutton Place or Manor,* the present residence of the Harison family. Crossing Green Street, this same path continues its course by the side of the cemetery, and is indicated by the dotted lines on the map as pursuing its course to one of the entrances of the great line of earthworks which exist on the summit of the hill. These earthworks are locally known as the Roman Camp.† They overlook the ancient channel of the river Ouse, and are situate but a short distance from the line of the Ermine Street, which, running from Pevensey and Chichester, continued its course through Surrey to the metropolis. Traditions connecting Seaford with the Roman occupation of Britain, long since led antiquaries to wild speculations as to its early history. An attempt was made to identify it with the

* Four manors formerly existed at Seaford, viz. Seaford, Sutton Sandore, Sutton Peverell, and Chinting, but they have become extinct. That of Sutton Sandore is of great antiquity. It is mentioned in the reign of King John as having belonged to William de Avrenches, who, when imprisoned as a rebel in the year 1216, had to purchase his release by the sale of this manor to the Abbey of Robertsbridge. In the Nonæ Returns for "*Sutton juxta Sefford*, 1341," an inquisition was taken as to the value of the church. Some interesting indications of the site of this early building were pointed out to us by the Rev. Mr. Harison, in a field adjoining his residence. Chinting, now represented by a single house, was an ancient township within the jurisdiction of the port of Seaford. The manor belonged, in the reign of Henry III., to Gilbert de Aquila, Lord of Pevensey and founder of the Priory of Michelham. The house is now the residence of W. W. Turner, Esq.

† The "Camp" is said to enclose an area of nearly twelve acres. That at Castle Hill, Newhaven, is about half the size. Similar entrenchments can be traced at Birling Gap. They enclose a high and also isolated portion of the cliff, the circumference of which measures about three-quarters of a mile. These fortified positions were probably, as suggested by the Rev. Edward Turner, in writing on the military earthworks of the South Downs, constructed for the defence of the valleys of the tide-rivers, by the intervention of which the continuous line of the South Downs is occasionally broken.

Castrum of Anderida, mentioned in the "Notitia" as being one of the nine fortresses which once served as a protection to the Littus Saxonicum, or Saxon Shore. This view was ingeniously advocated by the late Mr. Charles Verrall, in a communication published in Horsfield's "History of Sussex," vol. i. page 5; but of late years it has been universally admitted that the wonderful remains still existing at Pevensey alone answer the requirements of the claim.* It has been also suggested that Seaford, if not Anderida, may be identical with the Mercredesburn of the Saxon Chronicle, where, in the year 485, a great battle is known to have taken place between the South Saxons and the Britons. The late Dr. Tabor, a physician of Lewes, argued for Eastbourne as marking the site once defended by Ella, the Saxon chief; but a very competent authority on such matters, viz. H. L. Long, Esq., in a letter addressed to the late Mr. M. A. Lower, contributed the following valuable suggestions, which we are induced to quote as being strongly in favour of Seaford. "There is something," writes Mr. Long, "in the name of Seaford which I have often considered likely to throw some light upon the movements of the Saxon forces on their first invasion of our island. After Ælla (A.D. 477) landed at Cymensora, which I am disposed to think was Shoreham, he continued fighting his way to the eastward until he had made himself master of the entire coast, by the capture and destruction of Andredesceaster, or Anderida, in the year 491; but in the interval, A.D. 485, a battle of some importance appears to have been fought with the *Welsh* (*Belgæ*) at a place called *Mercredesburn*. This was a river, as the final syllable proves, as well as because the *bank* is mentioned.† The only river of any size in the line of these military operations is your river at Lewes, which then disembogued at Seaford, and which is of course, strategically, the exact place to expect to meet with such a conflict. Now, is not *Seaford* the Saxon translation of the British *Mearcraed*, as it is spelt in the Saxon Chronicle, but which, perhaps more correctly, would be *Mer* or *Mor*—Celtic for 'sea'—and *Rhy* or *Rhyd*, a 'ford'? There appears to be a superfluous *c* between the two words,

* In reviewing this subject, in his "Report on Excavations at Pevensey," 1858, Mr. Roach Smith proves that Anderida must be sought for between Lymne and the river Adur. In such a situation stands the Castrum at Pevensey, and there is no other camp or fortified place that could be substituted in place of it either in this limited track or throughout the whole line of what was called the Saxon Shore. "It must be understood," writes Mr. Smith, "that earthworks are quite out of the question. All the stations mentioned in the 'Notitia' are, or have been, castra built with strong stone walls."

† The passage in the Saxon Chronicle reads:—"An. Cccc lxxxv. This year Ælla fought against the Welsh, near the bank of Mercreadesburn."

and it requires a Welsh or Armoric scholar to decide whether its introduction is not necessary." That usually far-seeing antiquary, Gough, does not appear to have been in any way familiar with Seaford, for in his edition of "Camden" he does not refer to its antiquities; and, had he been acquainted with its numerous illustrations of Roman occupation, it is more than probable that, while not accepting Pevensey, he would have given the preference to Seaford rather than to Newenden, in Kent, when speculating on the site of the long-lost Anderida.*

There is also documentary evidence of the existence of Seaford of a very early character. It is mentioned in the eighth century, among other places granted to the Abbey of St. Denis, near Paris. In the eleventh century it became the lordship of

William de Warrenne, and in the year 1229 we hear of it as a "member," or "limb," of Hastings, one of the Cinque Ports. Edward the Confessor is said to have been the first monarch who bestowed the immunities and privileges enjoyed by the five ports, representatives, doubtless, of the ancient stations to which we have reference as being under the command of the Count of the Saxon shore.

The first recorded discovery of Romano-British remains appears to have been that made in the year 1825, when, quite accidentally, a large number of sepulchral urns were exhumed. Trenches were being cut for the purpose of disturbing the rabbits, who were gradually undermining the ground, and in the

* See "Memorials of Seaford," by the late Mr. M. A. Lower. Sussex Arch. Collection, vol. vii.

course of these operations the urns were discovered. The late Mr. William Harison, of Folkington, had no less than twenty of these vessels. A selection from them was engraved some years since, in one of the volumes of the Sussex Archæological Collections, and we are indebted to the Council of this Society for the loan of the woodcuts for the purpose of comparison with the objects recently found. Since that time several coins have been discovered. They illustrate the reigns of Hadrian and Antoninus Pius, and as recently as the year 1854 a fine gold medal of Antonia, daughter of Mark Antony, was found, not in the cemetery, but in the shingle, below high-water mark. This, we believe, is now in the possession of J. Maxfield Smith, Esq., of Lewes. In the year 1856 a Roman urn was discovered at Cuckmere, in a heap of mould which had been dislodged from its position by a fall of a portion of the chalk cliff on the western side of the river. Traces also of this period were seen at the pond above what was the head of the æstuary, in the direction of Sutton. This was the site of a Roman saltpan; and quite recently it was stated by the late Mr. W. H. Black, F.S.A., that in his survey of Roman Britain he had been successful in tracing the stadia along the coast from Newhaven to this town. With such evidence of Roman occupation, the existence of a cemetery is not surprising. The spot was doubtless selected from its position with regard to Green Street, its close proximity to the camp, and the soft nature of the ground, its situation being upon the top of a natural mound of light sand, forming part of an outlier of the lower tertiaries. At the southern extremity of the mound the sand is quarried for building material. Reposing upon these sands is about 3 feet of made earth, and the greater part of the whole area is now overgrown with furze bushes.

The operations of the committee were commenced on the 5th June last. Our President, Colonel Lane Fox, F.R.S., E. W. Brabrook, F.S.A., and ourselves were present. The trench first cut was from east to west, it being a likely spot, as suggested by the Rev. John Harison, who informed us that it was near the site where the fine urns were discovered in the year 1825. Three men were employed at this place for the greater part of a day (this section is marked No. 1 on the plan), without any success at all, although we cut down to the virgin soil. We next made a

cutting, about 6 feet deep, at the spot marked 2, but there likewise without any favourable result.

Our attention was next turned to the eastward portion of the cemetery (section iii.), where we cut a trench about 5 feet deep, through about 3 feet of disturbed soil, which is filled with flints, stones, bits of pottery, flint flakes, &c. We soon became aware that we were on likely ground, by the presence of small black patches in the sand, and which we found was caused by charcoal and ashes. A large piece of a broken urn was shortly discovered, with portions of another. Simultaneously with the opening of No. 3 trench, we commenced a trial cutting north and south, at No. 4, particulars of which will be given further on. In section 3 a perfect urn* (No. 1) of red ware was met with at a depth of 3 feet 6 inches below the surface. Upon cleaning it, it fell in pieces, but was subsequently mended. It measures 32¼ inches round the widest part, 15 inches round the base, and is 11 inches high. This urn contained a secondary interment, and bears marks of being turned upon a lathe. There is no ornamentation. Urn No. 2† was discovered close to No. 1, and is the most ornamented one that we have yet met with. It is of dull red ware, rudely embellished with tooled markings, contained within deep concentric lines, and partly by bands caused by its being turned upon a lathe. It is 9½ inches high, 30 inches in circumference at the shoulder, and 14 inches round the base. It contained fragments of bones.

No. 3 urn‡ from the same section we were not so fortunate in getting out entire, it being in a very fragmentary condition and consisting of pottery of a light red colour. It is ornamented with two irregular lines round the shoulder, worked with a tool into the form of half hoops, resting upon concentric furrows. It is 8¼ inches high, 26¾ inches round the widest part at the shoulders, and 13½ inches at the base. It contained the usual amount of bones.

No. 4 urn was still more fragmentary. It is of a brownish red ware, with deeply-tooled furrows round the shoulder, in which part the pottery is much thicker than in the others. It bears marks of having roughly tooled ornamentation above the shoulders. Fragments of bones, &c., were found with it.

On the 11th September the excavations were resumed with three labourers. A trench was cut from north to south to a depth of about 5 to 6 feet; the upper surface of the ground was made earth. At the depth of 3 feet from the surface we found flint scrapers, flakes, and fragments of early pottery, which is of a very coarse description of native work. At this depth a black seam occurred, which we cut into, and traced it out for about 4

* See fig. 1, Pl. xviii. † See fig. 2, Pl. xviii. ‡ See fig. 3, Pl. xviii.

feet horizontally. It contained a large number of rough flints, pebbles, some of considerable size, fragments of pottery, bits of charcoal, &c. They all bore evidence of having been submitted to great heat. Much of the clay was red, and had the appearance of rotten roof tiles. As no bone ashes were distinguishable at this spot, we came to the conclusion that this was the place where the funeral pyre was erected. Among the flints we noticed two round flint balls. These may possibly have been used as sling-stones. There were no indications of bones, and this would be accounted for, presuming the spot to mark the site of a ustrinum. It was sometimes the practice of the Romans to wrap the corpse in a sheet of incombustible material, so that, being unconsumed, the bones of the deceased would be all preserved, and at the same time be prevented from mixing with the coals and ashes of the pyre.* Upon finding this blackness of the ground gradually assume its normal appearance, we turned our attention to further opening out that portion of the cemetery where the urns were met with in June last. Having set one man to make a trench at No. 5, about 6 feet deep from east to west, two other men were employed to cut back the ground to meet him at No. 6. For matters of convenience we have numbered these sections. In No. 5, at a depth of 4 feet from the surface, many black patches of *small* extent were found in the sand. They were all at the same level. These were evidently the ashes collected after cremation, as in some of them fragments of bones were observable. These may have been enclosed either in urns or in cloths which have perished, or by wooden coverings† that have met with a similar fate. In one of these patches a bronze nail was found, and in others a flint flake.

What did these interments point to? Were they the remains of people whose relations were unable to find an urn in which the remains would be preserved, or were the relics those only of slaves who had been sacrificed upon the funeral pyre of some great chief or person of authority, and whose remains were placed in an urn in close proximity, as a few feet further in towards No. 3, urns more or less perfect were found. The latter was a common practice, as is recorded by Mr. Llewellyn Jewitt in his "Grave Mounds and their Contents." On page 35 the following remarks will be met with: "In instances where the ashes of the dead have been collected from the funeral pyre and laid in a skin or cloth before interment, the bone or bronze pins with which the 'bundle' was fastened still remain, although, of course, the cloth itself has long since perished. In other instances small stones have been placed around, and

* See "Inventorium Sepulchrale," Fausett, p. 195. † See fig. 3, Pl. xix.

upon the heap of buried bones before raising the mound over the remains. It is frequently found in barrows, where the interment has been by cremation, that there will be one or more deposits in cinerary urns, while in different parts of the mound, sometimes close by the urn, there will be small heaps of burnt bones without any urn. The probable solution of this is, that the simple heaps of bones were those of people who had been sacrificed at the death of the head of the family, and burnt around him."

The bronze nail now found may therefore have been used in place of a pin to fasten together the ashes of the deceased in a sort of cloth or napkin. In the absence, however, of further illustrations, which we may get in future discoveries, this application of the nail is far from certain. Nails were sometimes employed to fasten together boxes or coffers, to contain either personal ornaments for interment, or even for the charred remains of the individual. Bronze nails are less common than those of iron. Representatives of no less than five varieties are given by Mr. Roach Smith, as occurring among the remains at Richborough.* They are at times richly ornamented, and were probably used for decorative work. The bronze pins usually found in such interments as the present are generally without heads. Dr. Thurnam mentions such objects as having been observed by Sir Rich. Colt Hoare in no less than thirty instances, and, with the exception of five, all were from interments by cremation, and with which they were often the only objects. It was assumed by Sir Richard that they were for securing the bundle in which the remains were enveloped; but careful comparison, says Dr. Thurnam, leads to the conclusion that they were implements carried about by their owners which, from their small size, were peculiarly liable to be committed with the body to the grave or pyre, as the case might be.†

In cutting "6," near to the left-hand corner, between 3 and 4 feet deep, we met with a large urn‡ of thick, dark brown pottery. It was much cracked, and the shoulders were broken in by the pressure of the earth above. We were successful in getting it out well, but immediately we began to take out the contents, which were much caked in, the sides gave way in the line of the old cracks. This urn had been rudely repaired before being placed in the ground. It measured 15 inches round the base, and about 25 inches round the middle, and was perfectly plain, having no ornamentation.

Besides the fragments of bones that were in the urn, there were three nails with large heads, and a fragment of metal,

* See "Richborough, Reculver, and Lyme," by C. R. Smith.

† Archæologia, vol. xliii. page 465. ‡ See fig 4, Pl. xviii.

which might have been a coin, or a portion of a fibula, or some other ornament, and a flint flake.*

Within a few feet of the same spot another urn was found, a small one of red ware, thin, having a row of small, vertical, black painted lines upon it, probably round the shoulder. The urn was so rotten that it was all in fragments when discovered, but the whole contents were carefully picked out on the spot. In addition to the usual bones, it contained a bronze fibula,† shaped like a bird's tail, attached to a round disc, which probably was intended to represent the body; the pin was wanting. This specimen affords a good instance of what the Saxons afterwards copied and elaborated.‡ Two small flakes were among the ashes, and a piece of jet.

Another urn, so much crushed that it was impossible to do more than pick out the pieces, was found within a foot of the latter. It was of black pottery, thin, having two concentric lines or furrows round the widest part, with diagonal markings between. In addition to the ashes and pieces of charcoal, it contained a pin of a fibula, a nail, a small lump of fused metal, probably the fibula or coins, and one small flint flake.§

Several other spots were met with at the No. 3 end of cuttings 5 and 6, where the sand was perfectly black from the ashes, but only a fragment of pottery was now and then met with in these patches, with a few small fragments of bone. In one of these black patches, a nail, a flint flake, and a corroded piece of bronze, were met with, which might have been the remains of a fibula; also fragments of what appeared to be burnt slates were occasionally seen.

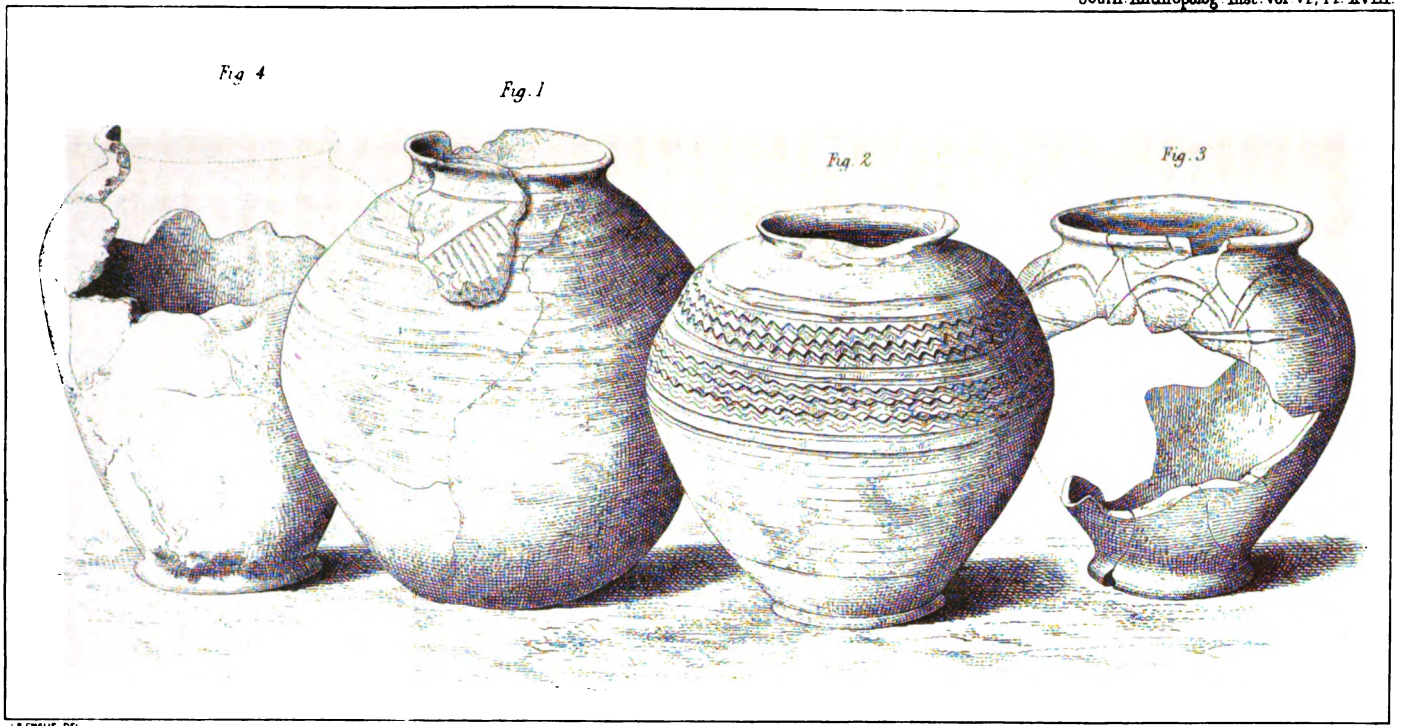
Of the iron nails referred to, they are but of small size, but ·times such objects have been found of considerable length. They have been thus observed in London, Colchester, York, and other places. In Mr. Roach Smith's "Collectanea Antiqua" (vol. 3), he devotes an interesting chapter to the illustration of the subject. He refers also to such nails as have now been found, as having appeared among the remains of bodies, which have either been burnt and deposited loose in the graves, or enclosed in urns of clay or glass. He quotes an example from a walled Roman cemetery discovered by the late Mr. C. Taylor

* See figs. 10, 11, 12, 13, Pl. xix. The fibulæ shown in figs. 1 and 2, Pl. xix. were found loose in the earth at the time of the diggings, and there was no evidence to show that they had been in any urn.

† See figs. 4, 5, and 9, Pl. xix.

‡ They strongly resemble certain bronze fibulæ found some years ago in the Crimea. In some excavations at Kertch, Dr. Macpherson found several such objects, accompanied by human remains. They are many of them in the British Museum, and are described and illustrated by Mr. Roach Smith in the fifth volume of his "C llectanea Antiqua."

§ See figs. 6, 7, 8, Pl. xix.



J. P. EMSLIE, DEL.

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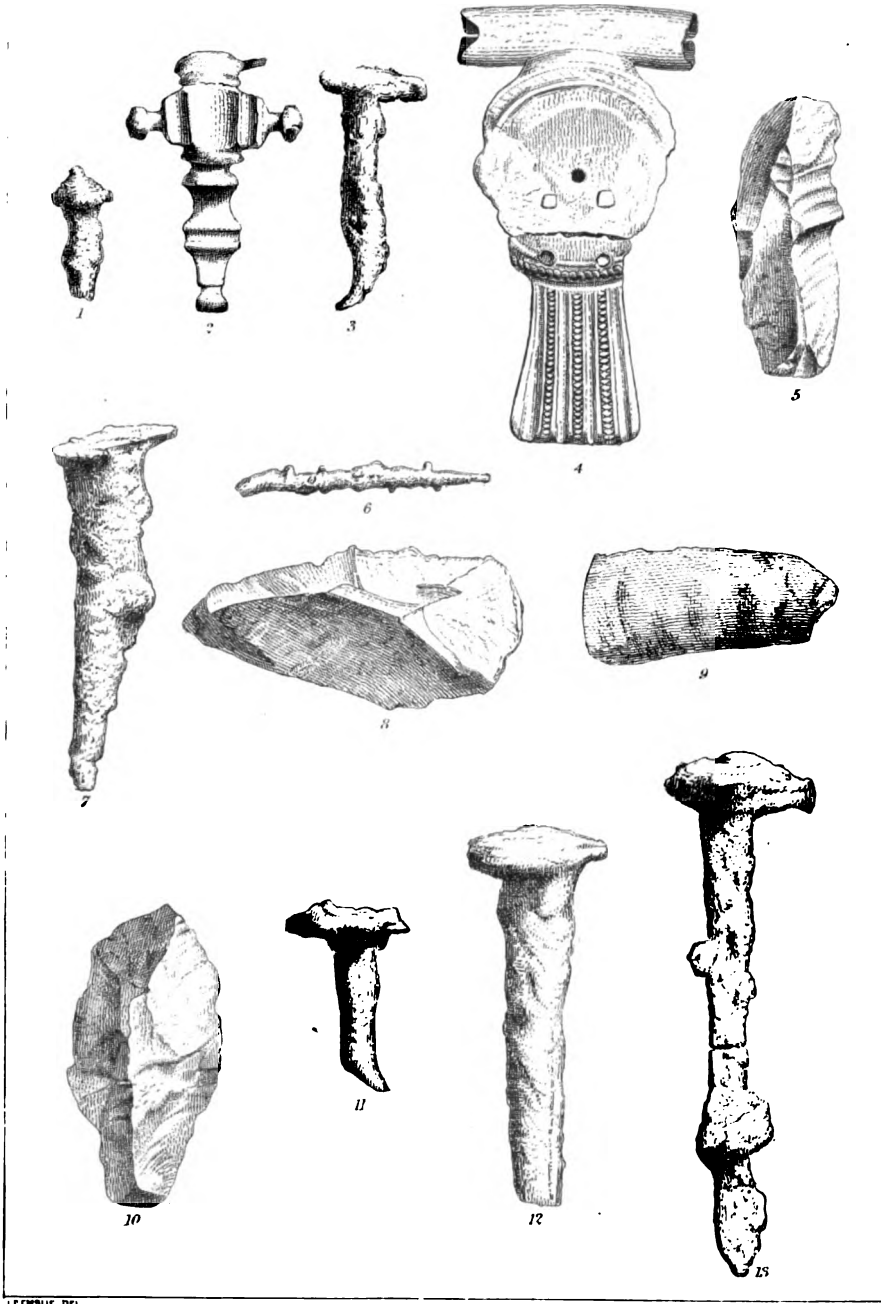
ROMANO-BRITISH POTTERY, SEAFORD, SUSSEX.



J. P. EMSLIE, DEL.

J. P. & W. P. EMSLIE, LITH., LONDON.

SEAFORD, SUSSEX.

Smythe, in Lockham Wood, near Maidstone, and excavated under the direction of that gentleman and Mr. Charles, of Chillington House. There was discovered a large number of vases, in one of which, of about the capacity of a gallon, was an iron nail in the midst of calcined human bones; it was perfectly free from rust, 2 inches long, and precisely similar to those of the present day. Mr. Wright also found many long nails in a large barrow near Snodland.

The presence of flint flakes or implements in the urns is a feature of considerable interest. Apart from instances of actual burial in the urns, they have appeared in large numbers among the charred remains, and were scattered about here and there, associated with broken pottery. Such conditions have been noticed by barrow-diggers in other parts of England. Dr. Thurnam mentions, among his Wiltshire researches, the presence of flint flakes and potsherds in considerable numbers, and usually in close proximity to the interments. They are traces, he writes, of a pagan custom, which is illustrated by the well-known line in *Hamlet*, of

"Shards, flints, and pebbles."

Various explanations of this practice of burying flint implements with cinerary urns have been given. Some attribute a symbolical meaning to both the potsherds and the flints; others suppose the sharp flints to be the knives with which the survivors lacerated themselves in signs of grief. On the whole, perhaps it is probable that the object in view was to lay the ghosts of the dead, and restrain them from walking the earth, it being asserted that flints, and other stones from which fire might be extracted, were efficacious in confining the manes to their proper habitations.*

At Alfriston, a village at no very great distance from Seaford, there existed a large barrow no less than 55 yards long. It is referred to by Gough, who also describes certain smaller tumuli and their contents—in one case an urn of unbaked clay, rudely ornamented, and containing bones and ashes. This was placed beneath a pyramid of flints.

Of the pottery but little need be said. It is rough in character, is probably of native, and perhaps of local manufacture. It resembles in every respect the earthenware that is usually met with in interments of this description. The vessels are for the most part such as would be in daily domestic use, and in the great variety that has been met with, we may have an indication that the cemetery—the first almost of its kind

* Compare Douce's "Illustrations of Shakspere," 1807, ii. 224; Arch. Journal, xxii. p. 117; Archæologia (Rolleston), 42, p. 428; Archæologia (Thurnam), vol. 43, p. 422.

that has been found in Sussex—may prove to be of far greater extent and interest than has been hitherto supposed, but much more remains to be done, and it must be admitted that the work belongs to labourers in the field of archæology rather than in that of anthropology. At the same time, the border-land between the two sciences is, to say the least, somewhat indefinite and obscure. Whatever information can be obtained to the advancement of the one can hardly fail to be of service to the other. No accurate knowledge of any site can be gained except by careful investigation of the place itself; and if, from the results of such exploration, we are enabled to derive additional knowledge of the habits and customs of the varied races who have lived and died upon this island, and who in each generation have left some distinctive features and characteristics that have influenced their successors, the accumulation of such facts must be of indirect service to anthropology, if not in its highest aims, yet of sufficient value to justify their record in the proceedings of the Institute.

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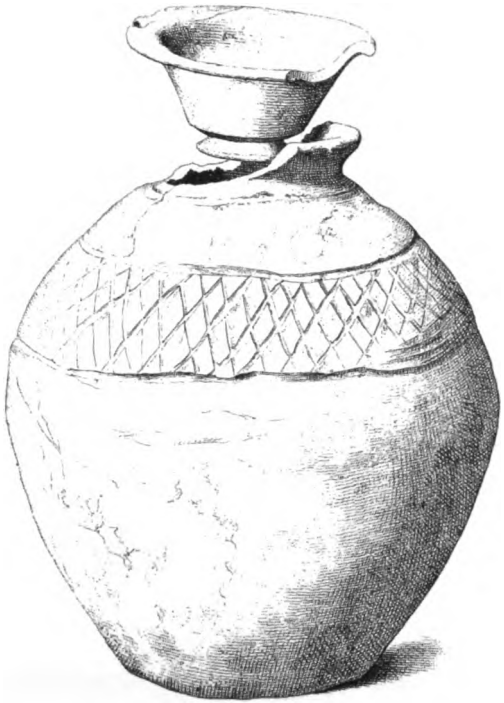

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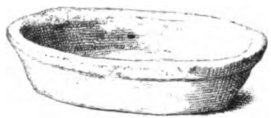

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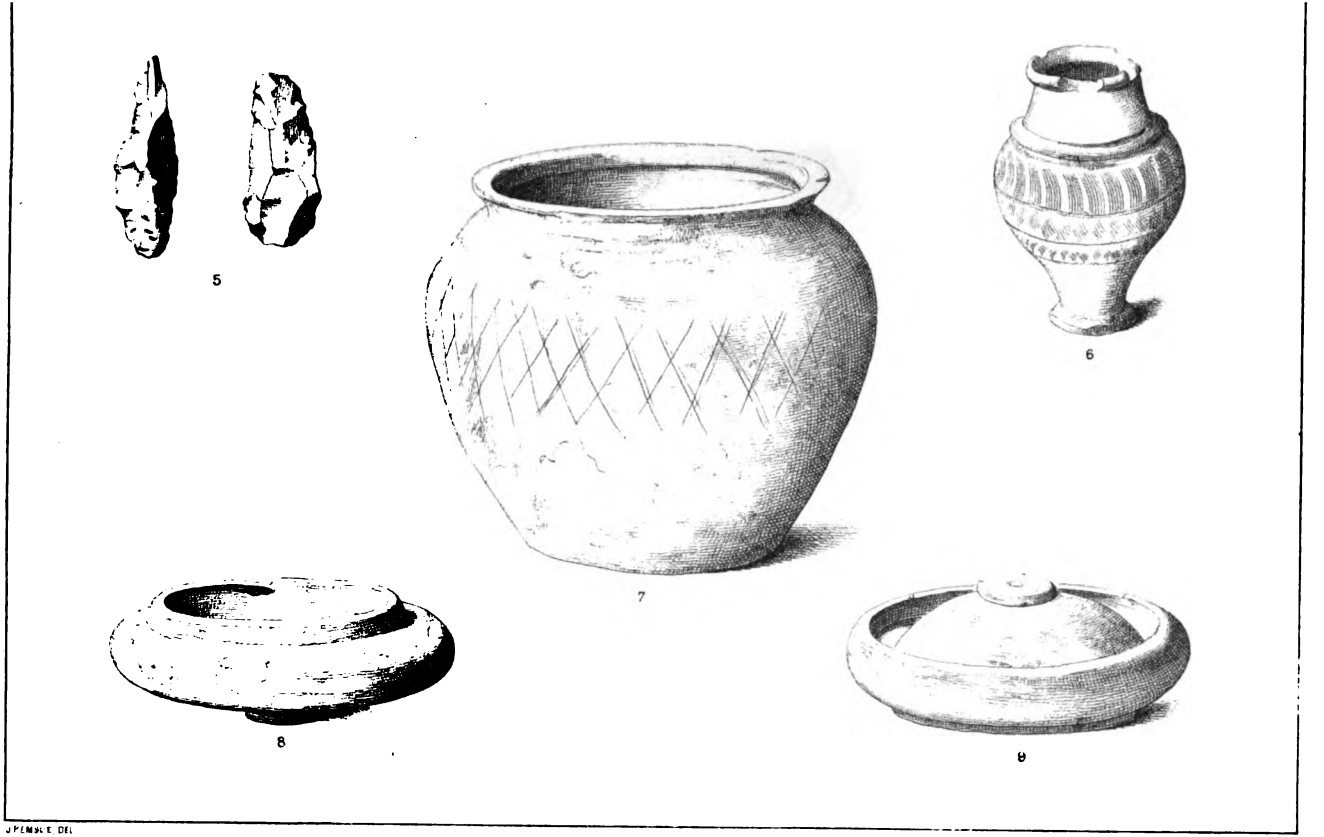


SEAFORD, SUSSEX.

THE ANCIENT POTTERIES OF THE NEW FOREST, HAMPSHIRE.

By the Rev. J. PEMBERTON BARTLETT.

THE remains of Romano-British potters' kilns have from time to time been discovered in various parts of Great Britain—at Castor in Northamptonshire, in London, on the banks of the Medway, at Ewell in Surrey, at Warrington, and at Shepton Mallet. A rude kind of pottery was made at Holt Forest, in this county, and I was some years since the fortunate discoverer of sites of several potteries in the New Forest. It was a bright and beautiful day in early spring, when in rambling in the Forest I happened to light on a piece of coarse-looking pottery that had been unearthed by a rabbit in making its subterranean home. On carefully examining it, I conjectured it to be of Roman origin. On going some little distance further, I found men busy draining—tall, long-backed, long-limbed West-Saxon-looking peasants, but withal civil and intelligent. Upon enquiring if they ever found fragments similar to the piece I had found, one man, with evident surprise at my interest in such a common-looking shard, told me that on a hill a short distance off I could get a barrowfull. Upon going to the spot described, which was in the then finely-wooded part of the Forest, I discovered what at first sight appeared to be three large depressed barrows. On searching among the grass and ferns with which they were covered, I found several mole casts, which consisted of small pieces of pottery mingled with a fine black ash-like mould. Upon digging into the apex of one of the mounds, the spade brought to light numerous fragments of different kinds of pottery, which led me instantly to conclude I had discovered the site of a potter's kiln.

I found from the workman that the hill was called "Crockkle," which struck me at once as a corruption of

Crock Hill, or even more probably of *Crock Kiln*. I returned home with my pockets filled with those interesting fragments, and my mind filled with those feelings of pleasure at the discovery which an antiquary only can thoroughly enter into. It may be perhaps that there are some who, like Wordsworth's peasant when looking on the primrose at the river's brim, would look upon these interesting and classically shaped vessels before me as only broken pots and pans, "and nothing more." But it is not so. They speak of a race that has passed away—of a conquered country—and bring before us the very articles of domestic use in those early times.

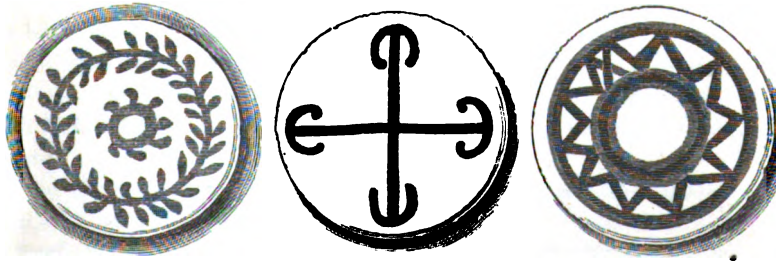
The circumference of the mounds at "Crockkle" varied considerably, the largest being rather more than 100 yards, the second between 70 and 80, while the third, which consisted chiefly of ashes and small fragments of pottery, and which bore no traces of a kiln, was about 50 yards in circumference, and was more depressed than the others. Having obtained permission from the proper authority to explore the kilns, I set to work by opening a trench about 3 feet wide at the base; the workmen then proceeded to undermine the artificial soil of which the mound was composed, then driving strong stakes into about two feet of ground, they were pushed forward, and the mass fell gently into the trench in a sufficient body to prevent any vessels contained in it from breaking. By these means the specimens now brought before us in the accompanying illustrations, and the collection which is in the British Museum, were from time to time brought to light, I hoped we might have found the masonry of the kilns intact, as Mr. Artis found in his researches among the potters' kilns of Northamptonshire, but in this we were disappointed, as the only traces were a mass of crumbling red brick soil, among which we found a few rough bricks, probably moulded by the hand. Around this mass of decayed bricks in two of the kilns a circle of large sandstone boulders was discovered.

From the decayed state of the bricks, the general coarseness of the pottery, and from the fact that among the great quantity of fragments dug out not a specimen was found with any figures or potter's name, it would seem probable that our forest kilns are of an earlier date than those of Northamptonshire. The only ornaments were circles, dots,

5⅛ inches high. Brown, with white pattern.

Light Brown. 4½ inches high.

Brown Ware. 4½ inches high.



Red patterns on bases of fawn-coloured pottery. Diameters, 4 inches.

Examples of Pottery found in the New Forest, Hampshire.

Proceedings of the Archæological Institute recording the Salisbury Meeting,[1] a drawing of a vessel found in a barrow, almost precisely similar to some found among the New Forest Pottery. Now it happens, curiously enough, that I have an almost exactly similar vessel, a well burnt urn of thin red pottery, in height 4¼ in., while its largest diameter is 2¾ in., a very trifling variation from the size of the one found in the barrow near Beckhampton. I find too on one of the plates of drawings (V.) illustrating the results of the examination of barrows, &c., by the Very Rev. Dr. Merewether, late Dean of Hereford, given in the same Volume, the drawing of a fragment of a small *ampulla* of somewhat coarse pottery found in a barrow near Silbury Hill, which is precisely the same shape as several specimens found in the New Forest kilns.

A small vessel full of silver Roman coins was dug up at Amberwood (about half-a-mile from the site now under consideration), which one of the workmen informed me was exactly the shape of a vase, of which he found several nearly perfect examples. One of the coins I know to have been of Valens, and one of Julian the Apostate, as they were exhibited before the Society of Antiquaries.

From these coincidences we may infer the probability of these vessels being manufactured at the Forest potteries. I was disappointed in my hope of finding any tools used by the workmen. About a pound of corroded sheet lead, and a lump of iron (about half a pound in weight), but so corroded as to render it impossible to form an opinion as to its use, were all that we discovered. The only coins found were two pieces of Hadrian in large brass, and three small brass coins of the lower empire, one of which crumbled to pieces on being exposed to the air; the other two were of Victorinus, who reigned in Gaul, and probably in Britain, from A.D. 265 to A.D. 267; but as all the coins bore traces of having been long in circulation, they were probably lost at the kilns as late as the end of the third century. How

[1] P. 108. List of "Antiquities found near Avebury." Sketches representing objects found in the neighbourhood, "which for the most part are still retained and highly prized by those on whose property they were discovered."

"No. 1. A well burnt urn of thin red pottery, found in a barrow on the south of Beckhampton, towards Tan Hill, at the head of a skeleton, lying at full length; round it were nail-heads as if of a coffin; a few feet from this was a smaller skeleton doubled up. The height of this urn was 4¼ in., largest diameter 2¾ in."

Red with white pattern. Height 8¼ inches.

Dark brown. 5½ inches high.

4¾ inches in diameter.

Diameter, 3½ inches.

Examples of Pottery found in the New Forest, Hampshire

long these potteries continued in use after this period must be left to conjecture, but they probably were worked till the Romans abandoned Britain, and it is not impossible they might have been carried on by the inhabitants after that event.

In one of the potteries we found a mass of clay apparently ready mixed and ground together for use. The district of the Forest where these potteries are situated is where the lower Bagshot Sands with their clays crop out, probably part of the same bed which is still used by the potters at Aldershott, and Verwood, on the other side of the Avon. Upon comparing the present style of pottery made there at this time with the specimens found in the Forest, we are struck with the great superiority of the ancient over the modern, both in design and hardness.

Potteries probably extended at intervals for miles throughout the Forest, and, no doubt, more remain to be discovered. Besides those at "Crock Hill" and "Island of Thorns," I found traces of kilns at Anderwood, Sloden, and Pitt's Inclosure, from all of which specimens have been obtained of various degrees of fineness and perfection.

Traces of potteries have also been more recently found by Mr. Wise, in Oakley Inclosure, Lower Hat, Ashley rails, and near Linwood. He also explored a mound in Pitt's Inclosure which I had not examined, and which he describes as "remarkable for the number of kilns placed close together. There were five ranged in a semicircle, and paved with sandstone." Close to the Westernmost kiln were found only the necks of various unguent bottles, while the Easternmost oven seemed to have been used only for baking a coarse red panchion, on which a cover with a knob for a handle was fixed; of these were found an enormous quantity. Mr. Wise also found there "two heaps of white and fawn coloured clay, and red earth placed ready for mixing, and another heap of the two clays mixed for the immediate use of the potter."

Mr. Wise found also a kiln with more perfect bricks than I had discovered, on some of which the finger-marks of the workmen's hands could plainly be traced. I also found the handle of a vessel (which is now in the Hartley Museum, Southampton) on which the graining of the skin of the workman's thumb can plainly be seen. Mr. Wise also found a

strainer or colander, a funnel, some fragments of mock Samian ware, part of a lamp, and some beads of Kimmeridge clay, which help to prove the Roman origin of the kilns; the iron tools of the workmen had dropped into the furnace, and were much melted; he also found the plank upon which the clay had been tempered, the wood of which, he supposes, owed its preservation to the quantity of iron in the soil, and was in a semi-fossilized state.

There are few who now ascribe these and the other potteries mentioned, to any other period than the Romano-British, and I believe Mr. Roach Smith was the first to deny the so-called "Samian" a British or Italian parentage, and to assign it to the Gaul. If we may assume that the vase previously noticed as found with the skeleton at Beckhampton was made at the potteries of this district, it favours the supposition that they were in operation at least as late as the end of the fourth century; the interment at Beckhampton being of the Roman period, and subsequent to the days of Constantine, when the Pagan rite of cremation fell into disuse.

ROMAN POTTERY KILNS, WEST STOW HEATH.

BY HENRY PRIGG, FSQ.

(*Read March 16th*, 1881.)

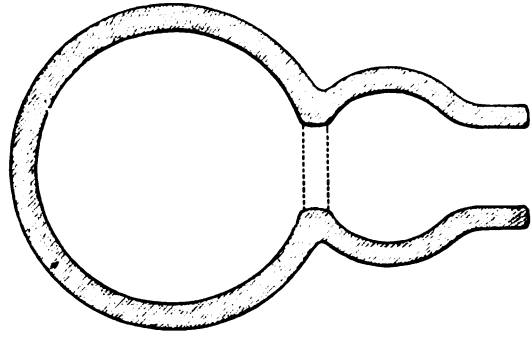
WHILST engaged in the resumption of excavations upon the site of the ancient circular enclosure on West Stow Heath, an account of which I had the honour of laying before the Association in March 1878, my attention was drawn to a slight ridge on the Heath, some 400 yards south-west of where I was at work, from a rabbit's burrow in which blackened earth and fragments of pottery had been thrown.

In the following spring I opened ground here, and my trench, after passing through a bed of carbonised matter, in which were freely mingled the necks, handles, and other parts of bottle-shaped vases of fawn-coloured Roman pottery, soon reached the walls of the kiln in which they had been fired. This structure was circular in form, 3 feet 6 inches in internal diameter, with walls 18 inches high, and 4 inches in thickness. It was composed wholly of puddled clay with a large admixture of chalk pebbles.

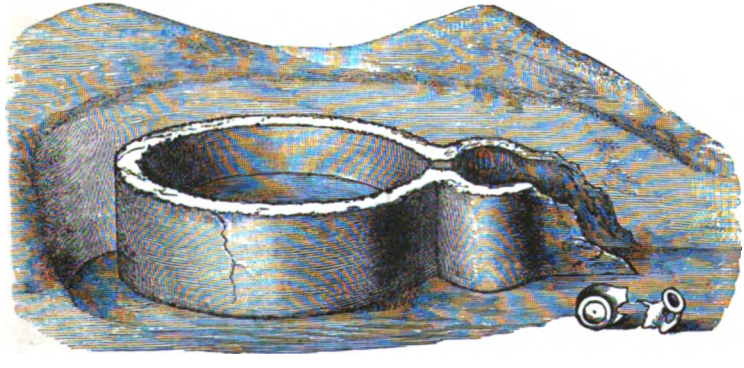
Impacted, as it were, into the eastern side of the kiln, and of the same construction, was the furnace, which was circular in contour, and 1 foot 10 inches wide at the kiln end; and straight-sided as it approached the mouth, which was 1 foot wide. The outline of the whole structure was thus bottle-shaped, and not altogether dissimilar to kiln No. 3, excavated by Mr. Joslin at Colchester, of which a plan is given in our *Journal*,[1] or to some discovered by Mr. Artis in the neighbourhood of the ancient Durobrivis.

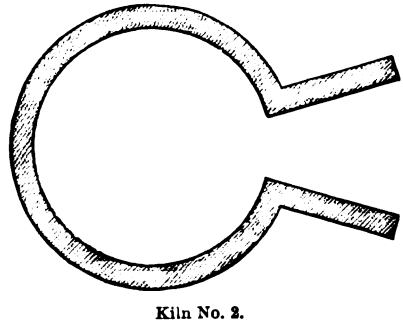
Unfortunately this kiln had, upon disuse, been partially dismantled, and no roof remained to the furnace, nor any material portion of the baking-floor, or its central supports. Half way up the walls of the kiln, however, projecting from a slight flange, was a keystone-shaped brick or thick tile, of small size, perforated centrally; the sur-

[1] Vol. xxxiii, p. 268.



Kiln No. 1.





Kiln No. 2.

ROMAN POTTERY KILNS, WEST STOW HEATH.

faces of which were covered with a greenish vitrification, an apparent indication of the position of the baking-floor and its construction.

Directly outside the walls of the kiln was the undisturbed yellow sand of the Heath, reddened in part by the heat to which it had been exposed.

With the exception of another perforated tile or two, a couple of vessels that had run in the firing, a small number of potsherds, and *debris*, nothing was found in the kiln, which, when cleared and exposed, presented the appearance shewn in the accompanying drawing.

At a distance of 8 feet due south of kiln No. 1, a second was come upon of the same construction, but differing somewhat in the length and form of the furnace, the walls of which splayed outwards, making the mouth, which also opened to the east, 20 inches wide. This kiln was 3 feet in diameter, and in a much more ruined condition than the other. Within it were found several heavy bricks, 13 inches long by 8 inches wide, and 3 inches thick, which were perforated with two holes of 2½ inches in diameter, separated by an interspace of the same length. Evidently these were the remains of the baking-floor. With them were a series of roundels of moulded brick, 6½ inches in diameter, and varying from 3 to 4 inches in thickness, which had formed the supports of the baking-floor. In both instances the floors of the furnace and kiln were of trodden clay, and much vitrified.

There seems, I think, no doubt that in the construction of these kilns the following method was pursued. A circular hole was dug, some four feet in diameter, and the same in depth, near the top of a slight natural bank. The slightly basin-shaped bottom of the excavation was then covered with well trodden clay, and the sides cased with the same material to the height of some 18 or 20 inches. Afterwards, when the clay had somewhat hardened, the furnace was constructed, and the brick baking-floor laid, supported upon three, or probably more, *pilæ* of the rounded bricks. Whether the furnace and its mouth were arched over with clay, or covered with some more stable material, is not in these instances apparent. The falling ground at the mouths of the furnaces had clearly been dug away to admit of a more convenient approach to them.

Respecting the pottery here manufactured, that found about the mouth of kiln No. 1, as previously stated, consisted principally of fragments of globular pitchers or bottles with a single handle (*ampullæ*), the remains of which are so frequently met with upon Roman sites. These varied in capacity from one pint to two quarts. The clay of which they are composed differs a little in colour and quality, some being fine and somewhat soft, firing to a ruddy hue, whilst in other examples it is more calcareous, and of firmer texture. Besides *ampullæ*, No. 1 kiln furnished a small proportion of the remains of little cups or bowls in light red ware, of delicate make, ornamented upon their sides with markings from a milled revolving wheel. There were also a few fragments of saucers, etc.

About kiln No. 2 the pottery was in greater variety, and from the hue of some of it it is evident that at times this was used as a smother-kiln. In addition to the fragments of light coloured bottles and *pateræ*, were portions of urns in brown ware, of a form sometimes used for sepulchral purposes; smaller jars in blackish ware, ornamented with burnished lines in diaper; and one fragment of a jar with its sides decorated with broad bands of dots put on in slip. There were also portions of urns of apparently somewhat late character, the fabric including in its composition numerous minute particles of mica.

I exhibit two lathe-turned urns[1] of precisely similar make, that were found in graves in a mixed Roman-British and Saxon cemetery in the neighbouring parish of Icklingham. These are clearly distinguishable from the ordinary forms of Roman pottery by their more bulging sides, and by the bosses or projections with which they are furnished,—a feature peculiarly Saxon. For some time I have been of opinion that this people settled very early in the district around Icklingham,—before, indeed, the Roman *régime* absolutely ceased; and this class of ware, it would appear to me, the potters of the old Roman

[1] They were originally black in colour, but after washing and exposure have become grey. I have recently, for experiment, revived the colour of the better made one by partly rubbing it over with sweet oil. The imperfect urn was damaged by the spade, and intentionally left unrepaired, to shew the mode in which the projections were formed. The impression of the point of the potter's finger is distinct.

station[1] upon their wheels manufactured in imitation of the hand-made fictilia of their Teutonic neighbours. It is not impossible they made it to order.

These vases did not contain the remains of cremated bodies, but were deposited with the dead, filled with food or drink for the use of the deceased in the land of spirits.

With the urns I also exhibit an imperfect patera of black ware of similar character, which bears the potter's mark, possibly the initial N, between two dots within a label, which is impressed in its centre, after the manner of Samian. This was found placed edgeways betwixt the right arm and body of a skeleton[2] lying north and south, which, with others, were met with in digging sand in the ridge separating the Heath of West Stow from the low meadows bordering the river, and only a few score yards to the south of the site of the kilns. I am disposed to regard the interments as Saxon.

Upon the completion of the examination of the two kilns described, excavations were made for many yards in their line, at the edge of the little ridge; but no other examples were met with. It is evident, however, that others exist beneath the surface of the Heath, and that rather extensive pottery works were at the period carried on hereabouts. I have succeeded in finding the place from whence the clay was obtained, a spot on the same Heath, some half mile to the east, and near the river. Here, amidst some scrubby brushwood and brakes, are a series of basin-shaped pits, some holding water, and others floored with a deposit of peat over 2 feet in thickness. The pottery works of West Stow Heath must be regarded as connected with the Roman station of Icklingham, from which they are distant only half a mile.

[1] There is a large cemetery of burnt Saxons within sight of the station at Icklingham, and from it I have obtained cremated remains enclosed in urns of undoubted Roman fabric.

[2] From some disturbed soil near this I obtained a portion of the lip of a mortar bearing within a label the name A BICoF reversed; but I have yet to identify this ware as a local manufacture.

AN ACCOUNT OF THE

DISCOVERY OF ROMAN REMAINS

ON THE

EAST CHESSWOOD ESTATE, WORTHING, 1881.

BY

ALEXANDER JAMES FENTON, ESQ.

[Reprinted from the "Sussex Archæological Collections," Vol. XXXIV., 1886.]

LEWES:

H. WOLFF, "SUSSEX ADVERTISER" OFFICE.

1886.

AN ACCOUNT OF THE DISCOVERY OF ROMAN REMAINS ON THE EAST CHESSWOOD ESTATE, WORTHING, 1881.[1]

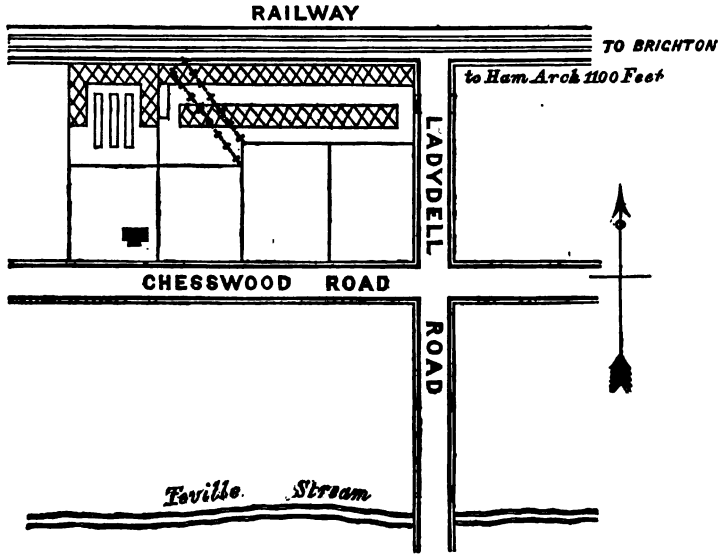
By ALEXANDER JAMES FENTON, Esq.

In the spring of 1881 workmen were engaged in trenching the ground of Mr. Robert Piper on the East Chesswood Estate, Worthing, then occupied by Messrs. Webster and Co. as part of their nurseries. At a distance of about two or three feet below the surface they met with a number of urns and other pieces of Roman pottery. The pieces first found by the men, they stated, were very soft, and broke to bits, and they took no further notice of them than to break them smaller and dig them in again. In this way there is no doubt many pieces of ware of different sorts were destroyed, and the havoc was not stopped till Mr. Piper one morning noticed the ground strewed about with the small fragments of urns and parts of the other destroyed vessels. He called the attention of the men to these pieces, and then learnt what had taken place. The vessel No. 11, to be subsequently mentioned, was then handed him, and the Samian bowl No. 20 and the vessels Nos. 8 and 12 were afterwards recovered from a workman who had taken them home. It was also ascertained that a short time previously other pottery had been dug up, broken, and buried again a few feet southward of Messrs. Webster's nurseries when a trench was being made for laying down drains.

After this the men's operations were watched, and they were enjoined to be careful. The result was that the other pieces of pottery described in this account

[1] A note of this discovery appeared in Vol. XXXII. of the Society's "Collections," p. 233.

were found and preserved. They consist of urns containing calcined human bones, Samian bowls, and other ware, all of Roman date. Only one coin was found. It was of brass, but so decayed that no trace of any inscription or figure could be seen.



The accompanying plan shows, by the double line of crosses, the spot where the pottery was found. It seems to run in a line from north-west to south-east, pointing towards Cissbury on the north-west and south-east towards a spot in the Forty Acres Field, where Mr. E. C. Patching, some few years ago, discovered an urn containing bronze celts.[2] From the number of urns found it appears certain that the place was used as a burial ground during the time of the Roman occupation of the country, and from the known fact that the Romans made their burial places beside their roads, it is very probable that a Roman road existed hereabouts, perhaps

[2] No account was, I believe, ever published of this find. Mr. E. C. Patching has five of the celts, and also the mass of metal the residuum at the bottom of the vessel, frequently found on such occasions. These and two or three more are all I have been able to trace of about 40 celts which I have heard were found in the urn. The celts I have seen are some of them solid and some hollow, and similar to those figured in Wright's "Celt, Roman and Saxon" (Nos. 1, 2 and 3). Another of the celts is somewhat similar to No. 4. They had evidently been cast in moulds.

leading towards Cissbury Camp, which seems to have been occupied not only by the Romans, but by the Britons before them, and most likely by the Saxons afterwards.

The present, however, is not the first discovery of Roman remains at Worthing. It is recorded that coins of Diocletian and Constantine were found in 1826-8 when the foundations for Park Crescent were made. Park Crescent is somewhat less than a mile in a straight line westwards from the East Chesswood Estate, and about the same distance from the sea. Funeral vessels are also stated to have been disinterred in making the shallow cuttings for the railway a little to the west of Ham Bridge. The railway, it will be seen from the plan, is immediately north of Messrs. Webster's nurseries, which are not far westward of Ham Bridge, and there can hardly be a doubt that the railway cut through the same line of remains as the pottery described in this account was found in. This tends to show the number of interments that took place here, and very probably further explorations on the Manor lands north of the railway would bring more remains to light.

Several urns and skeletons of Roman date were found at Cissbury about 10 or 12 years ago.

The urns now preserved in a more or less perfect state are five in number. Besides these, however, there are numerous pieces of rims, feet, and parts of other urns which were broken by the workmen in getting them up. The pottery was in a very soft state when first found; the subsequent exposure to the air seems to have hardened it. All the urns found contained calcined human bones in very small pieces, and earth. The earth was the clay soil of the spot, and had doubtless worked gradually into the urns during the many centuries they have been buried there. Nothing in the shape of a cist or other protection was found. The urns appear to have been simply interred in the ground about 2ft. 6in. or 3ft. below the present surface, and the other pottery was found some of it close to one or other of the urns, and the rest of the pieces by themselves.

No. 1.—A funeral urn of light grey coloured ware, ornamented with five indented lines running round the circumference, two just under the rim, and the other three lower down. This urn was broken into nearly forty pieces, but has been put together with "coaguline," which has been used for mending all the broken pottery. It answered very well with all except the urns which could only be held together permanently by glueing the inside, and then lining them with thin muslin.

No. 2.—A funeral urn similar to No. 1.

No. 3.—The rim and foot of a funeral urn of a much lighter grey colour than Nos. 2 and 4, and of a thicker and rougher ware.

No. 4.—A funeral urn of light grey coloured ware, ornamented with two indented lines round the circumference at some distance apart. Height, 6 inches; greatest diameter, 7¾ inches. This urn contained at the top some small pieces of black ware a quarter of an inch thick, ornamented with intersecting circular lines.

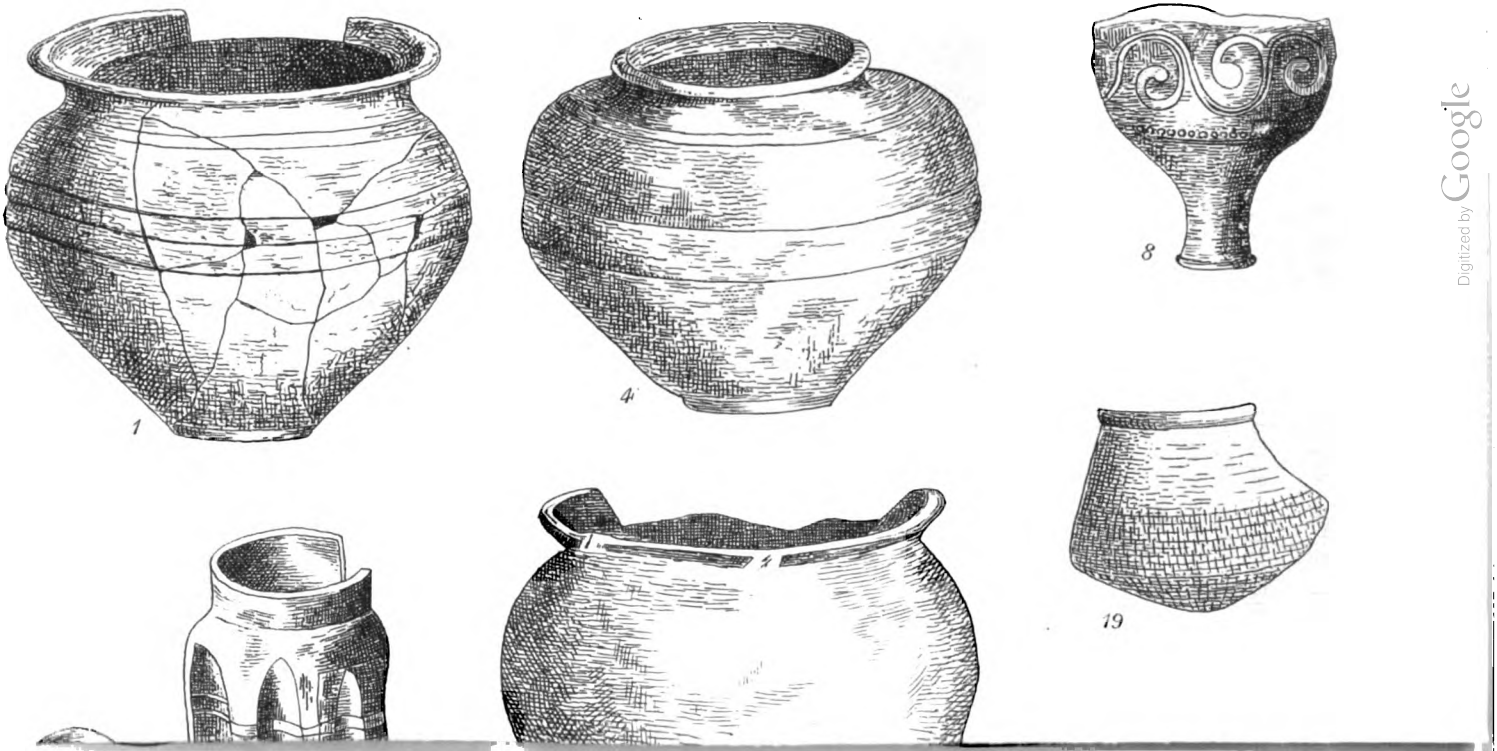
No. 5.—A funeral urn without any ornamentation; height, 6¾ inches; greatest diameter, 8½ inches. This urn was found with the bowl of Samian ware (No. 22) inverted over its mouth, and the small bowl No. 17 was inverted over the foot of No. 22.

No. 6.—A funeral urn of a dark brown (almost black) ware. There are traces of a pattern formed by diagonal lines in the broadest part. Height, 8¼ inches; greatest diameter, 6¼ inches.

No. 7.—A small portion of the lower part of a vessel, probably a funeral urn, and similar in shape to the foot of No. 5. It is of red ware, apparently Samian. The surface is rough, and similar to Samian ware which has lost its glaze. All the urns except No. 6 show the marks of the lathe inside.

No. 8.—The lower part of a vessel of a pale Indian yellow coloured ware, glazed red (Indian red) inside and black outside; the outside glaze has worn away from the prominent ornamental parts. Height, 3½ inches; greatest diameter, 3 inches.

No. 9.—A Pocula of similar ware to the last, but glazed black inside as well as out. The vessel is not



Hanhart imp.

ROMAN POTTERY FOUND AT EAST-CHESSWOOD, WORTHING. 1881.

quite perfect, the outside glazing is partly worn away, but where perfect it still retains its polish. Height, 5 inches; greatest diameter, 2¾ inches.

No. 10.—A small part of a Pocula similar to the last.

No. 11.—A Pocula somewhat similar in shape to the last two, but larger and of a thicker and coarser ware, without any polish. The surfaces of the ware are red, the middle part of its thickness being slaty grey. It is glazed black inside and out. Height, 5½ inches; greatest diameter, 2¾ inches.

No. 12.—A vessel somewhat similar to the last, but smaller and thinner, and of a deeper black. It is not broken, and the colour of the ware beneath the glaze cannot be seen. Both this and the last are very hard. Height, 3½ inches; greatest diameter, 2¼ inches.

No. 13.—A vessel of soft Indian yellow coloured ware, unglazed. Height, 5¾ in.; greatest diameter, 4½ in.

No. 14.—Part of a vessel of similar ware and colour to the last. It has apparently had a handle. Height, 3½ inches; greatest diameter, 3¼ inches.

No. 15.—The mouth and part of the handle of a vessel of similar ware and colour to the last. Height, 2 inches.

No. 16.—The shoulders and neck of a vessel of grey-coloured coarse ware. Height, 1¾ in.; length, 2¾ in.

No. 17.—A small bowl of hard yellowish red ware. Height, 1¼ inches; diameter, 3 inches.

No. 18—Is apparently a piece of wedgwood ware that has in some way got among the collection. Probably it was found near the surface.

No. 19.—The side of a vessel of hard grey ware, glazed black. Height, 2¼ inches.

No. 20.—A bowl or Patera of Samian ware in almost perfect preservation, with the potter's mark (SEAERIM)[3] stamped in the centre inside. The V is upside down. The glaze still shines. Height, 1¾ inches.

No. 21.—A bowl of Samian ware similar in size and shape to the last, but not in such good preservation. The potter's mark is illegible.

No. 22.—A bowl of Samian ware in very good preser-

[3] *i.e.*, Severi manu—"SEVERI M." is amongst the list of Roman Potters' marks at the end of Wright's "Celt, Roman and Saxon."

vation. There is no potter's mark. Height, 2 inches; diameter, 8 inches. This bowl has the conventional ivy leaf pattern round the rim.

No. 23.—A bowl of Samian ware similar in size and shape to the last.

No. 24.—A bowl of Samian ware without ornamentation or potter's mark. Height, 2¼ in.; diameter, 7¾ in.

No. 25.—A bowl of Samian ware similar to but smaller than No. 24. Height, 2 in.; diameter, 7 in.

No. 26.—A bowl of Samian ware. Height, 2¼ inches; diameter, 7 inches.

No. 27.—A bowl of Samian ware similar to No. 26.

No. 28.—A bowl of Samian ware without ornamentation, in a most perfect state of preservation. Height, 1½ inches; diameter, 7 inches.

Besides the foregoing, there were many fragments and the following pieces found:—

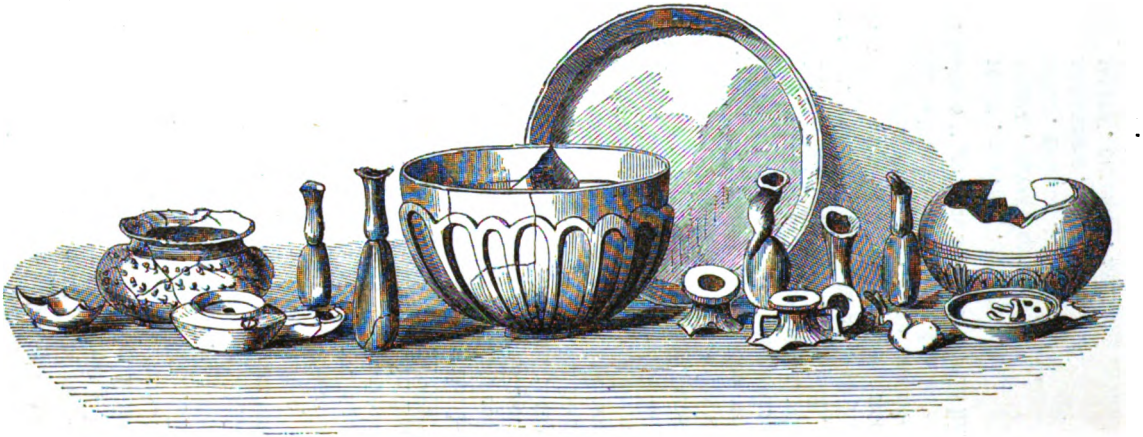
A large bowl of Samian ware, the only ornamentation of which was a series of wavy lines near the centre, from which they radiate. It is 10½ inches broad and 2½ inches high. The glaze is gone. One of the urns was found standing in this bowl.

A bowl of yellow ware, about 6 inches in diameter and 1½ inches high, which has been glazed red in imitation of Samian ware. It has a small flat handle.

There are also some fragments of black ware. They are parts of pateræ, about the size and shape of our ordinary flower-pot saucers.

All these pieces of pottery are now preserved by Mr. Robt. Piper, at his office, at the Ladydell Nurseries, and he will be pleased to show them to any Member of the Society.

The discovery of this pottery adds another instance to to the list of Records of the Roman occupation of this part of the South Coast. The remains found at Chichester, Bignor, Cissbury, and on the Downs behind Lancing are well known to Sussex archaeologists. Whether there is any record of remains of Roman times found on Chanctonbury I know not, but a year or two ago I found there fragments of moulded Roman bricks, Samian and other ware, and some tesseræ.



ROMAN GLASS VESSELS AND POTTERY FROM THE CEMETERY OF URICONIUM. (*Scale 3 inches to a foot*)

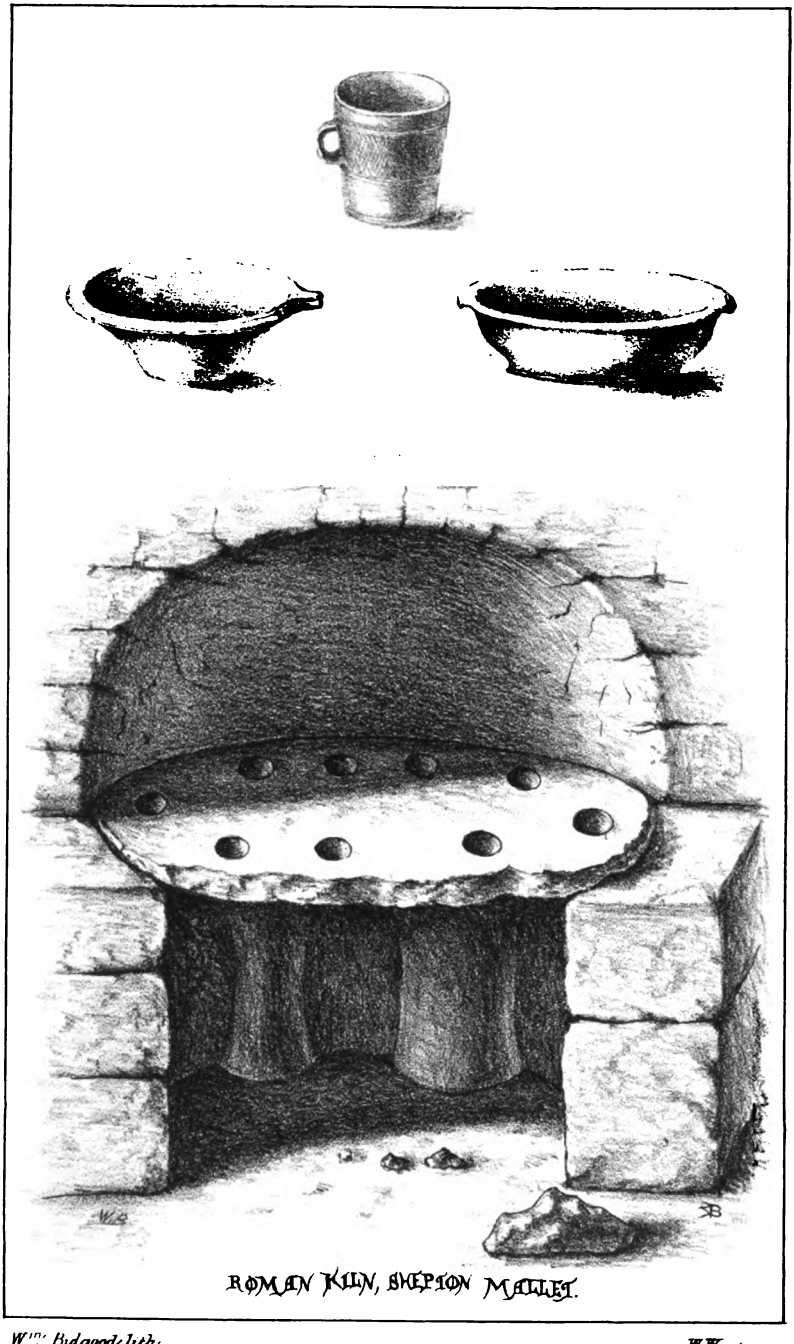
of the sand of the field,* and intermixed with these many visible particles of pure black carbon, evidently introduced artificially into the sand. On putting some of the soil in a platinum crucible, and heating it red-hot for a few minutes, *all* the charcoal was burned away, and I got a pure red sand like that of the cemetery. The contents of these two vessels were quite black, though I have no doubt they were found deeper than the superficial covering of black mould. One of them had evidently been subjected to fire, so that the supposition that this had been filled with some unctuous oblation, and then acted upon by heat in the funeral pile, is not at all improbable."

These glass vessels help to demonstrate that the same forms were observed by the Romans in their performance of the sepulchral rites in Britain as in Italy. Some of them are found greatly affected by fire, and have been no doubt placed on the funeral pile; others, on the contrary, are perfect, and have evidently never been in the fire, but were no doubt deposited with the urn. Examples of them, in both conditions, are given in our last wood-cut. The one in the middle of the three to the right has been thus affected by the heat in a lesser degree; but the other, lying on the ground beneath it, has been so much melted as to have lost its original shape.

A very usual accompaniment of Roman interments is the lamp, usually made of terra-cotta. There can be no doubt that, under the influence of sentiments with which we are not well acquainted, lamps were among the usual offerings to the dead, and that, when offered, they were filled with oil and lighted. They were found in the tombs at Pompeii, where they were probably placed in the recesses of the walls by the side of the urns of the dead. Their frequent occurrence under such circumstances gave rise to a number of old legends of the finding of lamps still burning in tombs of the ancients, who, it was supposed, had invented a material for the lamp which, once lighted, would burn for ever. One epitaph, found at Salernum, and given in Grüter, which commemorates a lady named Septima, expresses, in what appears to have been intended for elegiac verse, the wish that whoever contributed a burning lamp to her tomb, might have a "golden soil" to cover his ashes.

HAVE . SEPTIMA . SIT . TIBI
TERRA . LEVIS . QVISQ
HVIC . TVMVLO . POSVIT
ARDENTEM . LVCERNAM
ILLIVS . CINERES . AVREA
TERRA . TEGAT

* To explain this, it must be stated that the soil of the field, which is hardly two feet deep, lies upon a deep bed of pure sand, and that the interments had all been made in the sand in which the urns and other objects were found.



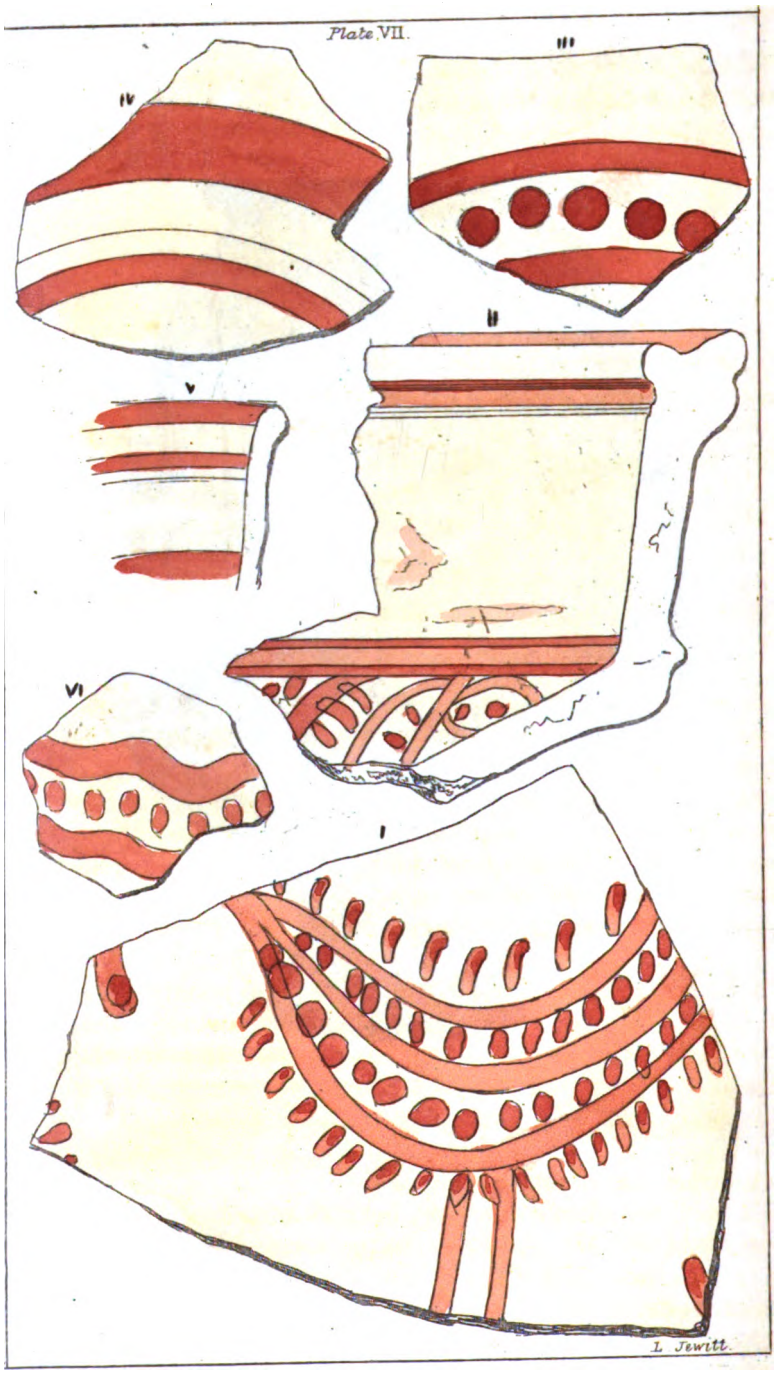
ROMAN KILN, SHEPTON MALLET.

Wm. Bidgood lith.

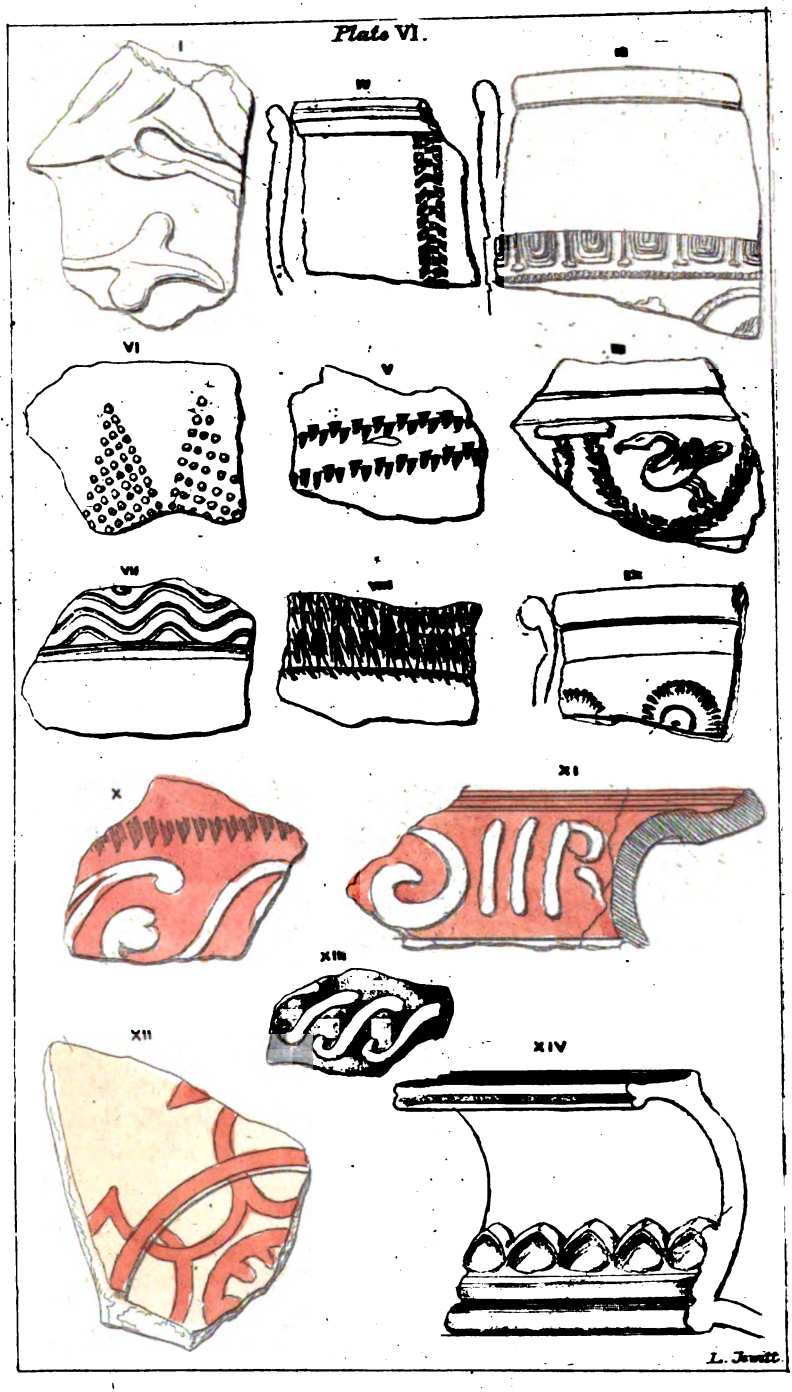
W. West imp

VASE GALLO-ROMAIN

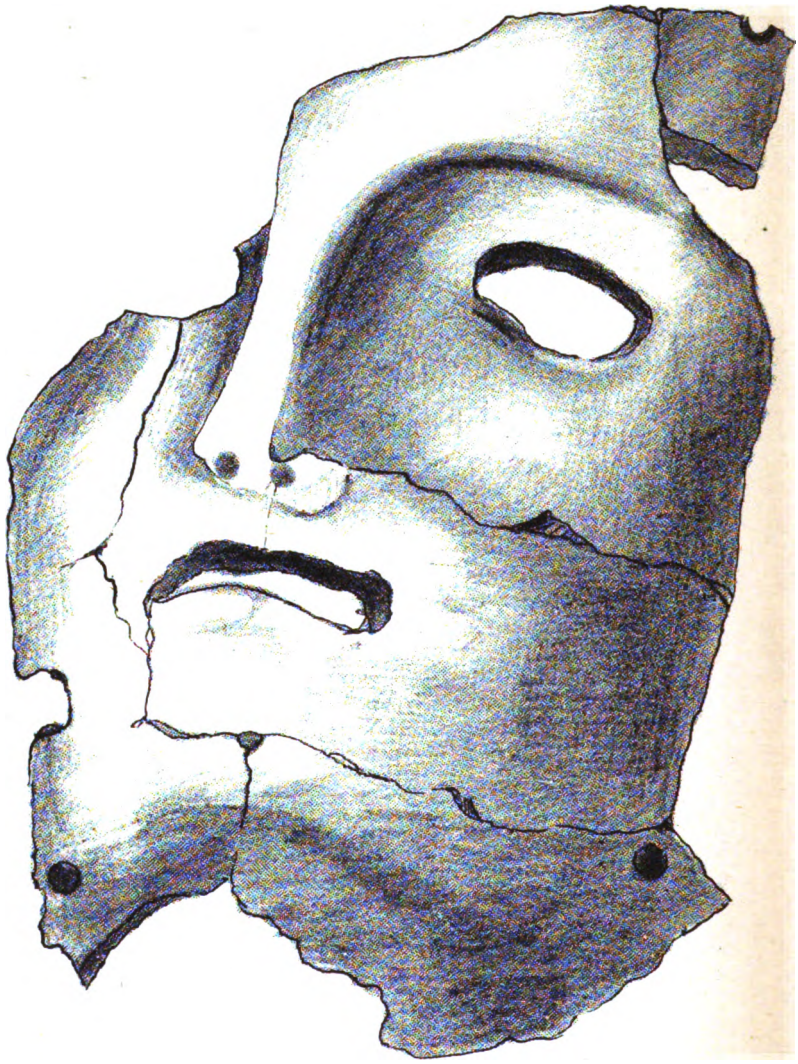
découvert à Nouvion-en-Ponthieu



HEADINGTON.



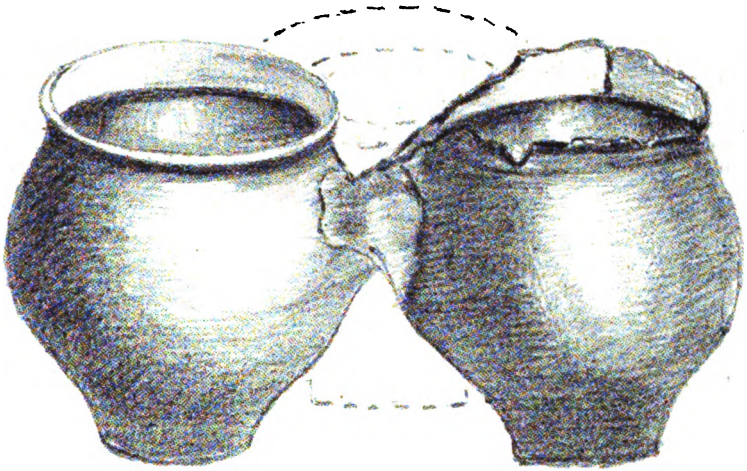
HEADINGTON.



TRAGIC MASK.

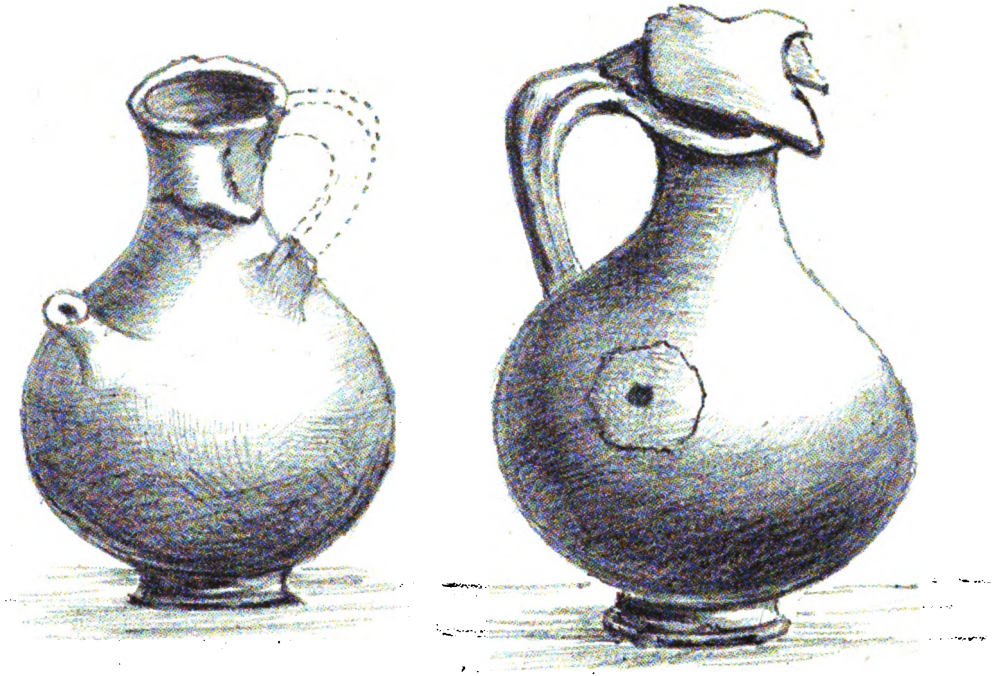
(PERSONA TRAGICA)

FROM THE ROMAN SITE AT WILDERSPOOL.



TRIPLE FLOWER VASE.

(HALF SIZE) FROM WILDERSPOOL NEAR WARRINGTON



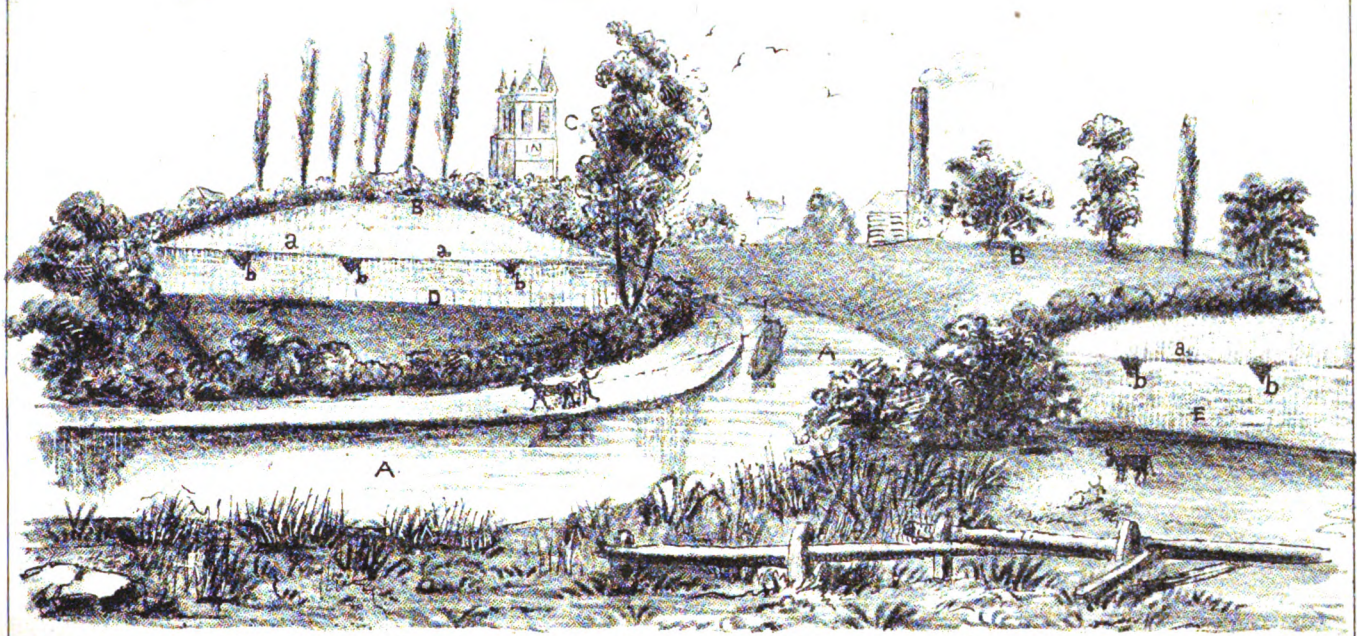
INFANT'S FEEDING BOTTLES.

(TETINÆ)

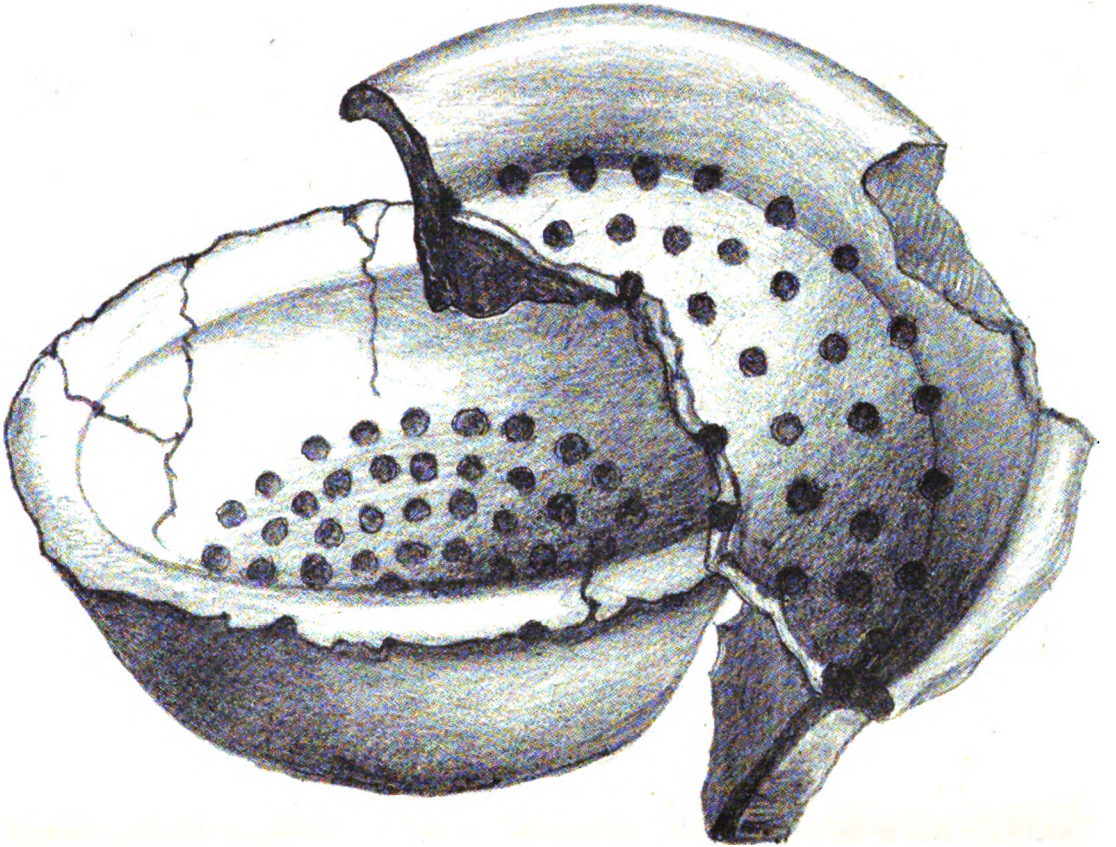
(HALF SIZE) FROM WILDERSPOOL NEAR WARRINGTON.

EXCAVATIONS AT THE ROMAN SITE AT WILDERSPOOL,

TAKEN FROM THE CHESTER ROAD.



EXPLANATION, A.A.—*The Old Quay Canal.* B.B.—*North and South banks of the Canal.* C—*St. Thomas's Church.* D. *Section of the North bank.* E—*Section of the South bank.* a. a. a *Line of the Roman surface, with* b.b. b. b b *its ditches or drains, in which the Roman Pottery is chiefly found.*



COLANDERS OR STRAINERS.

(COLA)

(HALF SIZE) FROM WILDERSPOOL NEAR WARRINGTON

ON SOME RECENT DISCOVERIES OF ROMAN REMAINS AT WILDERSPOOL.

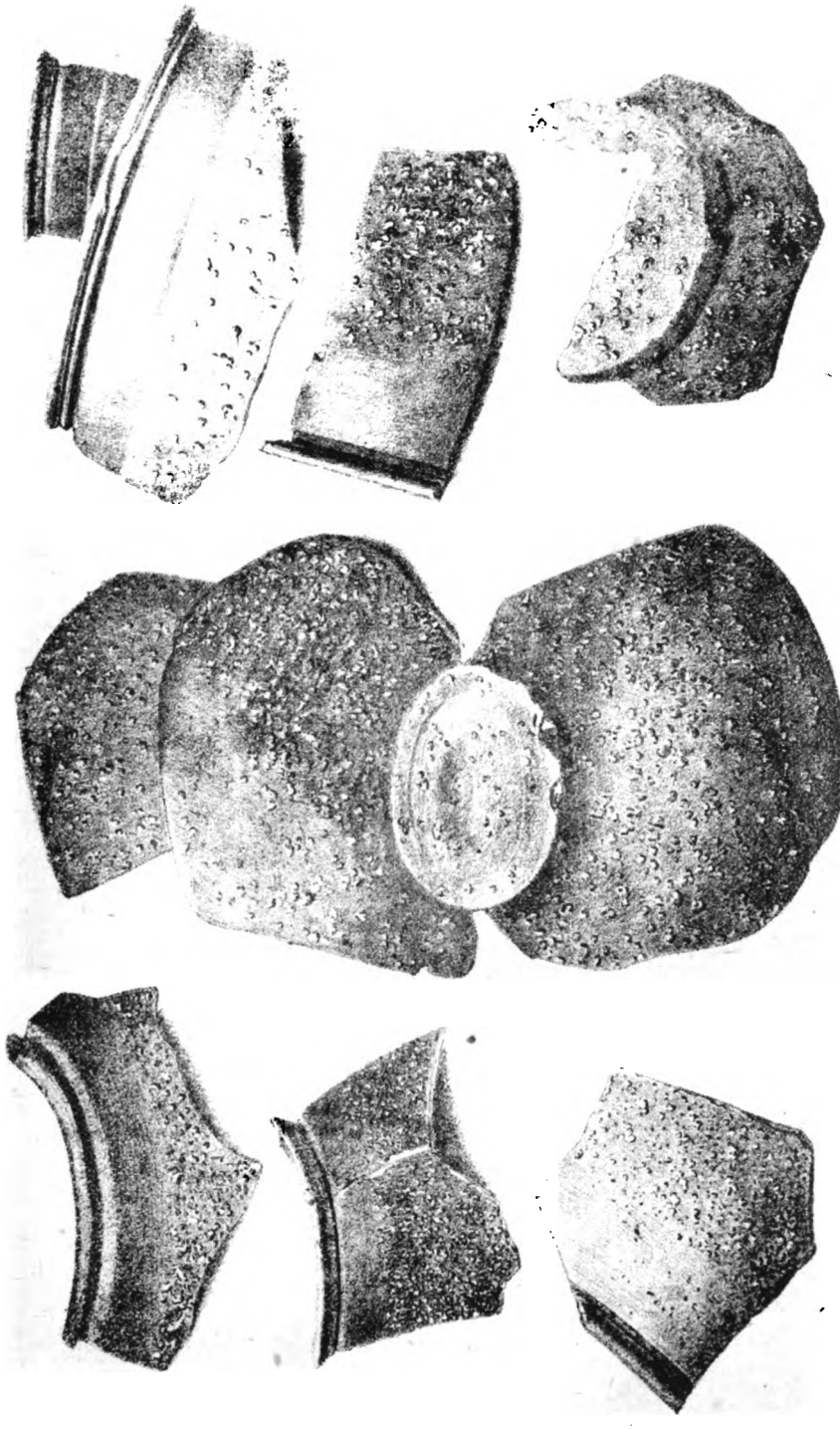
BY H. SYER CUMING, ESQ., F.S.A. SCOT., V.P.

FOR some years past our respected associate, Dr. Kendrick, has carefully watched the excavations proceeding at Wilderspool, on the southern bank of the Mersey, near Warrington, and has from time to time informed us of the more singular and important discoveries there made of Roman remains.[1] To appreciate fully the interest of these discoveries, it will be well to state briefly that Wilderspool is the presumed site of the *Condate* of the second and tenth *itinera* of Antoninus; that it is considered to have been a *mutatio*, or post-station, established (if the coins exhumed here be taken as an index of date) as early as the reign of Vespasian; and that its final destruction was effected, like that of other Romano-British settlements, by fire,—the occurrence of incinerated human bones and charcoal in sepulchral *ollæ* leading to the belief that the devouring conflagration took place ere the Christian mode of coffin-burial was introduced into North Cheshire. As yet little more is known of the rise and fall of *Condate* than is set forth in these few words; but as excavation progresses, a flood of unexpected light may burst forth, and we may be able hereafter to read its story more fully than we can in those few relics which now claim our attention.

Whenever a search is made on a Roman site, *fictilia* are sure to be found more abundant than any other remains; and this is eminently the case at Wilderspool, where fabrics of divers sorts are mingled together, showing that a trade was carried on with *Cantium*, *Durobrivæ*, and other seats of manufacture. But *Condate* seems to have had its own *kerameicus*, traces of which are still discernible on the eastern side of the station. Among the presumed "home-made" wares may be included a group of highly curious vessels more or less perforated on their sides and bottoms, some of which are undoubtedly *cola vinaria*, or wine-

[1] See *Journal*, ix, p. 75; xiv, p. 269; xvii, pp. 60, 322; xviii, p. 391; xix, p. 127; xxvi, pp. 111, 241.

PLATE 20



ROMAN "ROUGH-CAST" POTTERY

strainers; and others, as equally certain, thuribles or incense-pots. They are formed of a fine compact paste of a palish red hue; inclining to soft, from being rather slightly baked, but evidently wrought with much care, and with some attention to elegance of contour as well as fitness for purpose. The leading features here pointed out are well exemplified in the several specimens submitted for inspection by Dr. Kendrick, some of which demand a special notice. Those requiring fewest remarks are the *cola*, of which we have before us a portion of the side and bottom of one example showing between fifty and sixty round perforations; and another one in which the entire form may be satisfactorily made out, although it has suffered much from breakage. This *colum* is a hemisphere with a broad rim intended to rest on the edge of another vessel. Its extreme dimensions are,—height, full two inches and three-quarters; diameter at outer edge of rim, six inches and a half; diameter of outer circle of holes, four inches and a half. As usual with Roman terra-cotta *cola*, these perforations are made from the *outside;* so that slightly raised circlets of paste are produced on the inner surface, and may have aided in holding back any sediment of wine or impurities that chanced to be in the snow employed in cooling it. The *cola* discovered at Wilderspool approach much nearer in character to the fragment exhumed at Cirencester than to the London example in the Baily collection, both of which are described and figured in our *Journal* (xxv, p. 246).

The next division of our group of perforated vessels includes examples of thuribles or fumigators; and of these there are two very distinct types, the one saucer-shaped, the other bowl-formed; but of both, unfortunately, we have only portions left us. The smallest of the first named variety, when perfect, was about four inches and three-quarters in diameter, and one inch and seven-eighths in height. In the centre of the bottom rises a cone surrounded by a broad ring nearly two inches and a quarter in diameter at the outer edge; and between them is a circle of five perforations; and beyond the ring, six additional holes; and just at the part where the sloping sides blend with the base, there is a third series of holes, of which traces of only five remain; but in the perfect vessel they probably numbered from ten to twelve. These several apertures, unlike those

in the *cola*, were made from the *inside* of the thurible, so that a portion of the displaced paste protrudes on the exterior surface. There are the remains of another of these saucer-shaped thuribles, which probably measured at least six inches in diameter when entire; and in which the perforations in the sides are larger, and further from the bottom than in the foregoing specimen, and the bottom appears to have had but four holes through it. Another difference to remark is, that the cone is solid; whereas in its companion it is hollow, and may be likened to what is called the "kick" in a modern wine-bottle. These rare and curious vessels may have been employed in perfuming rooms, or for burning incense before divinities on domestic altars,—for that many a private dwelling had its *foculus* is a fact certified in many ways.

But besides these we have to describe a portion of a third thurible differing altogether in form from the foregoing, being the upper part of a bowl-shaped vessel, the contracted mouth of which seems to have been about four inches in diameter. The lip is rather thicker than the side, and the first line of perforations is about five-eighths of an inch below the lip. When perfect this thurible must have borne resemblance to a mediæval fuming-pot of glazed earthenware exhumed on the site of St. Katharine's Hospital, near the Tower, and which was provided with a tubular handle whereby to carry it.[1]

In addition to these thuribles of local manufacture there are portions of other perforated vessels of less definite character, both as regards purpose and place of fabric. They are very neatly made. The paste or body is of a fine compact quality, of a dull reddish brown colour, both surfaces being covered with a black coating or *vernis*. These vessels seem to have had an outer diameter, at the mouth, of at least seven inches and a half; but their altitude cannot be pronounced with certainty, but it may be stated that the tallest piece measures full two inches and a half in height. The sides appear to have been nearly upright, and about three-quarters of an inch below the expanded lip are indications

[1] In our *Journal* (ii, p. 136) is a two-handled, vase-shaped thurible found at Upchurch, which may be compared with one discovered at Litlington, engraved in the *Archæologia*, xxvi, Plate 45, fig. 30. For a notice of domestic censers, see *Journal*, xv, p. 280; and of thuribles, xix, p. 81; xxi, p. 161; xxii, p. 448.

of a horizontal perforated diaphragm. Until we obtain a larger amount of evidence than these fragments disclose, it would be unsafe to decide whether they be portions of *cola* or thuribles. *Pocula*, etc., palpably from the same manufactory as these vessels, have been exhumed in London and Essex, but its site is at present unknown.

Equally difficult to localise as the above is a portion of a *catinus*, or rather a *catillum*, with convex sides, which when entire measured full six inches in diameter, and one inch and three-eighths in height. The paste is of a dingy reddish hue, and in it are mingled minute pebbles, or very coarse sand, reminding us much of some of the Keltic pottery. Both surfaces are coated with black, and the under face of the bottom is ornamented with a projecting ring with a circle of depressions within it, made probably with the rounded end of a stick.

We have before us another vessel, or, to speak more truly, the remains of a trio of vessels, which ought not to be passed over in silence, but which will be spoken of more largely on a future occasion. This group of *ollæ* is three inches and four-sixths in height, each two inches and three-quarters in diameter at the mouth, and united together by three perforated ligatures; so that if one vessel were filled with fluid, all above the depth of two inches would flow into the other two receptacles. These *ollæ* are made of the same sort of reddish paste before described; and if the *cola* and thuribles be of *Condate* fabric, it follows that they have a like origin.

Among other fabrics claimed by the Lancasterians as home-made, is a variety which Dr. Kendrick proposes to designate "rough-cast pottery," and a description of which is best given in the words of our learned friend, who says that "The paste or body of the vessel whilst in the soft state, and whilst still upon the potter's wheel, was more or less thickly sprinkled with dry powdered clay, so as to roughen its surface. The roughness was then removed at the upper part of the vessel, and often in horizontal bands or stripes likewise, and the lip or rim was very delicately finished; after which the whole vessel appears to have been dipped in a thin "slip" or clay-wash, to fix the roughness permanently. This process is so similar to that called "rough-casting," when applied to rustic edifices, that I venture to propose the distinctive name of "rough-cast ware" to these

singular productions of the Romano-British potters. Fragments of this ware are well represented in the accompanying illustration (Plate 20), which with gratitude we record as the gift of Dr. Kendrick to the Association.

Though rough-cast ware abounds at Wilderspool, it is not very frequently met with in other localities; but it is still a kind with which I have long been familiar, both from description and examination of examples which have fallen in my way. One of the illustrations to Mr. Jewett's valuable paper on discoveries at Headington, near Oxford, printed in our *Journal* (vi, p. 64), is a *poculum*, three inches and a quarter in diameter, of this sort of pottery, of which several other fragments were found, "extremely light, and some of red, and others of chocolate colour. The rim and upper part of the vessels are smooth; the lower rough, being covered with little points." Vessels of similar ware have been exhumed in Essex, the remains of one being thus described in the catalogue (p. 84) of the pottery in the Jermyn-street Museum: "Fragments, apparently part of a vase with indentations of the sides. Body, red where most fired; dark inside. Upon the body, pounded fragments of pottery (apparently) scattered before glazing. Glaze, dark coloured. Found at Colchester. Presented by the Rev. A. C. Henslow." Perfect cups of this ware, from the same locality, may be seen in the British Museum.

Pocula of rough-cast ware have been exhumed in London. Mr. Baily has two examples in his museum; and I have one perfect specimen, and a number of fragments of different vessels. The entire cup is about four inches and three-eighths in height, and was found, some years since, in cutting a sewer through Houndsditch. The paste is of a bright red hue, and the surface has been carelessly sprinkled with pounded terra-cotta, or powdered clay, before it was covered with a buff coloured coating. This *poculum* was certainly not produced in either the Wilderspool, Headington, or Castor kilns; but was probably wrought in *Londinium*, where a *kerameicus* existed during the Roman *regime*, in a portion of the space now called St. Paul's Churchyard. All the pieces of rough-cast ware I possess were baked in the Durobrivian ovens, and discovered in Fenchurch-street in 1867. They are of superior fabric, highly fired; the paste, when broken, appearing of a whitish hue; but both surfaces of the

fragments are of a dark chocolate colour. It will be observed that the parts just beneath the rims are quite smooth, as described by Dr. Kendrick, and the rest of the external surface thickly sprinkled with comminuted pottery; the rough-casting extending in some instances over the base of the vessels, as it does in the examples from Wilderspool and Houndsditch.

We not unfrequently find the exteriors of the smother-kiln ware of the Upchurch *kerameicus* decorated with dots of "slip" more or less thickly clustered together; and the query rises in the mind, whether this species of adornment suggested the rough-cast embellishment, or the latter gave a hint to the Kentish workmen. The question is not without a certain degree of interest, as it affects the relative priority of the respective fabrics.

The rough-cast decoration does not seem to have found favour with either the Saxon or Norman potters; but we meet with traces of it in Germany in the fifteenth century, though in England it was not revived until a much later period. In the eighteenth century the saucers for parlour flower-pots were adorned with rough-cast, and also the lustre-jugs once so fashionable, but now so rarely seen. But we are straying far away from Wilderspool and its Roman remains, and must return at once to them.

So large a number of *mortaria* have already been described in our *Journal* (ii, 166; vi, 57; vii, 86) that we might well believe that we had been made acquainted with all the varieties of this familiar utensil of the Roman *culina*, but the discoveries at Wilderspool add somewhat to our knowledge of its form. The novelty consists in the rim being extended on either side into an *ansa* or handle, whereby the vessel can be conveniently lifted from its bearings, and carried about. Up to this time Dr. Kendrick has met with at least ten *mortaria* with these lateral *ansæ*. The specimen before us is eleven inches and a quarter in diameter, and ere its bowl was ground through must have been close on four inches in height. Its paste is identical with that of the *cola* and thuribles, and has quantities of silicious fragments pressed in, to form a hard, triturating surface. The spout is much shorter than usual, and has a rather sudden downward inclination.

Dr. Kendrick states that a very considerable variety of

mortaria are exhumed on the site of *Condate*, from which he has gathered the following potters' marks, all of which seem to differ from those met with in London: A.R.B., BRO., D.I.I.O., DOCILIS, HF.C.S., ICO., VRILIM.

This paper has already grown to such a length that we must not dwell on several other kinds of *fictilia* brought to light at Wilderspool, however well deserving comment,—such, for instance, as the white ware of which *amphoræ* occur, with the subjoined sigils impressed on their *ansæ*, and none of which are seen on London "finds,"—A.P.M., C.S.I., L.A.L., R.AMZ. Had time and space permitted, much might be said respecting the Samian pottery, both foreign and native; but we must press on to the crowning glory of the late discoveries, the very gem of the present assemblage of relics,—in short, the rarest and most precious object which the excavations at Wilderspool have afforded,—a veritable antique *persona*, or mask of terra-cotta; to all appearance the work of some *Condate figulus*, at least if colour and character of paste be accepted as guides to locality. (See Plate 21.) Deeply must we regret that this visor comes to us in such a shattered and fragmentary state; but enough is preserved to show that it is of ample size to cover the human face; the eyes, nostrils, and mouth, being open to allow sight, respiration, and voice, to proceed without interruption. There have been two perforations towards the lower part of each cheek, and probably the same number on each side of the forehead, through which cords passed to lace the mask to a cap, hood, or wig, which covered the head of the actor, for I presume there cannot be a doubt that it was fabricated for the *theatrum*.

Among the Greek and Roman terra-cottas in the British Museum is a full-sized *persona comica* of fine workmanship, to all appearance intended for the stage; the eyes, nostrils, and mouth, being left open, and a small round hole made in each ear for cords. There is also another mask in the Museum, in which the eyes are perforated and the mouth closed; which may be a *persona muta* for a silent actor, such as would be needed in some of the comedies of Plautus and Terence.

Julius Pollux (*Onomasticon*, iv, sect. 133 seq.) enumerates twenty-five masks for tragedy, exclusive of those required for the personation of certain heroes, etc., and forty-three

for comedy; so that it seems perfectly hopeless to attempt to identify the Wilderspool visor with any special name that has descended to us; but I think we may safely pronounce it a *persona tragica*, from the grave and almost ghastly expression of countenance.

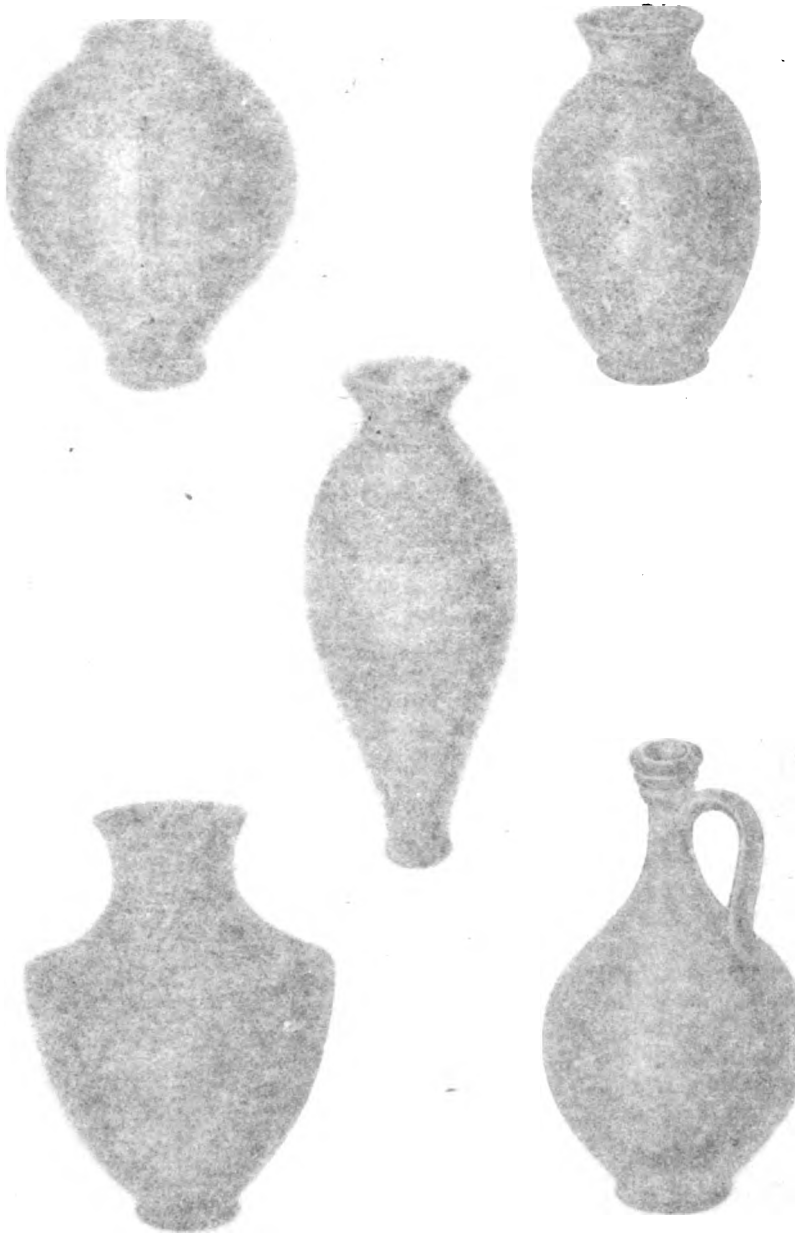
With regard to the antiquity of the theatrical *persona*, we may just observe that Horace, in his *Art of Poetry* (line 278), states that in the time of Thespis, who flourished, B.C. 540, the performers' faces were disguised by being smeared with lees of wine, and that Æschylus was the first who introduced the mask upon the stage. But if reliance be placed on Suidas (*s. v.* Χοιρίλλος), the poet Chœrilus, a contemporary of Thespis, was the inventor of such a device; and further (*s. v.* Φρυνιχος), that Phrynichus added the female *persona* to those hitherto employed, and Neophron of Sicyon that of the pedagogue (*s. v.* Νεοφρῶν).

According to Virgil (*Georg.* ii, 387), some of the earliest masks were formed of the bark of trees. Pollux tells us that leather lined with linen was next employed; and we find by Hesychius they were afterwards wrought of wood.[1] All traces of antique visors of these materials have perished, and the three of terra-cotta here described must be regarded as among the few and most interesting mementoes of the classic stage which time has spared.

Although I am fully aware that I have done but scant justice to the various objects entrusted to me for exhibition by Dr. Kendrick, I trust sufficient has been said to prove that the discoveries lately made on the site of *Condate* are of a novel and highly interesting nature, and give promise that the vein of archæological wealth now struck on is far from exhausted, and may yet yield still richer treasure.

[1] Masks of carved wood have been employed by some nations in modern times. I have an extraordinary one for an Indian snake-charmer, crested with the cobra or asp, painted of various hues, which was formerly in the Dawson collection; and another worn by dancers of the Naas tribe of North-Western America, coloured "after the life."

THE INTELL[illegible]



THE INTELLECTUAL OBSERVER.

OCTOBER, 1865.

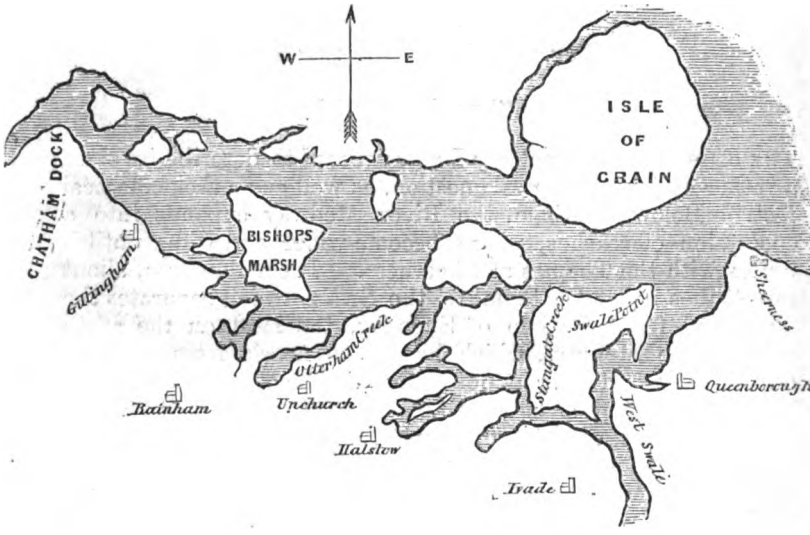
ROMAN POTTERY—THE UPCHURCH WARE.

BY THOMAS WRIGHT, F.S.A.

(*With a Coloured Plate.*)

THE class of Roman pottery I now proceed to describe involves a rather curious geological question, as well as an archæological fact. Below Chatham, the River Medway expands into a succession of reaches, which become wider and wider until it unites with the Thames at Sheerness. From Rainham, about three miles below Chatham, to the Swale, which separates the main land from the Isle of Sheppey, the land on the south side of the Medway, which here runs nearly from west to east, is low and marshy for some distance from the shore. This low ground is cut, by the encroachments of the river, into numerous creeks, which will be best understood by a glance at the map given in our cut. The bottom of these creeks is formed of a soft, but very tenacious, clay, which may probably be two or three feet deep, and this is covered by an accumulation of from two to three feet of soil. In the clay we find at a slight depth a continuous deposit of Roman pottery, almost all either broken or defective, mixed with the remains of burnt fuel from the kilns, and attended with other circumstances, which leaves no room for doubt of their being the refuse of extensive Roman potteries. We may judge, indeed, of their extent from the fact that they reach along the river from Rainham to the Swale, between five and six miles, and inward, on an average, from a mile to a mile and a-half. The greater portion of this low ground is divided into the Upchurch Marshes and the Halstow Marshes, named from the two parishes over which they extend. This bed of pottery is nowhere seen to more advantage than in Otterham Creek, in the former parish, which winds up to near Upchurch church. To

explore this creek with any success, you must enter it with a boat at low water, when a large extent of clay is left uncovered on each side the water, which you can only walk upon, or rather into, with long waterman's boots, and you soon reach the layer of pottery underneath by means of a stick, or, which is the more effective method, by thrusting your hand and arm into the clay, when you may pull up almost as much pottery as you like. As the pottery was first observed and examined here, it has been called by antiquaries Upchurch Ware, though the Roman potters' works extended over several parishes. The pottery is no less abundant in the creeks and dykes of the Halstow marshes, from Otterham Quay to Stangate Creek, but



Map of the Upchurch and Marshes.

these localities are of less easy access than Otterham Creek. There can be no doubt, not only from the extent of ground covered by the potteries, but from the frequent occurrence of the sort of pottery made here, among Roman remains in Britain belonging to different periods, that these potteries were in full activity during the whole extent of the Roman period. The site of the kilns was moved as the clay was used up, and at the same time the refuse pottery was thrown on the ground behind them, so that, when at last abandoned, this extensive site presented a surface of ground covered almost entirely by a bed of refuse pottery. It would seem that, to produce its present appearance, the ground must have sunk, so

as to be covered with water, which perhaps deposited a new bed of clay, and that after this it must have become raised again, to receive its surface of soil, since which the water of the river has trespassed upon the ground in its new elevation, and formed the creeks as they now appear; and, though possibly the state of the ground may be explained otherwise, yet it is well worthy of consideration in connection with the interesting question of the change of the coast level.

The existence of these Roman potteries is not altogether a modern discovery. Dr. Battely, whose *Antiquitatis Rutupinæ*, or Antiquities of Richborough, was written before the beginning of the last century, had observed the remains of this

7 6 5 4 1 3 2 8 9

Examples of Roman Pottery from Upchurch.

pottery at Upchurch, which he terms *urnas atque vasa nigricantes*, "blackish-coloured urns and vases," and he speaks of it in that book, giving it as his opinion (in which he was correct) that the locality in which they were found was not a Roman cemetery, but the site of Roman potteries. The antiquaries of the last century, and of the earlier part of the present, neglected or despised the information given by Battely; and Halsted, the well-known historian of Kent, actually discredited the notion that such pottery had ever been found there. We owe our first knowledge of the full truth to our distinguished antiquary, Mr. Roach Smith, who has given interesting accounts from his own personal observation in the *Journal of the British Archæological Association*, and in his *Collectanea Antiqua*,*

* See the *Journal of the British Archæological Association*, vol. ii., p. 134, July, 1846; and Roach Smith's *Collectanea Antiqua*, vol. vi., p. 173, 1864. Mr. Roach Smith had first called attention to this pottery in 1840, in a communication to the Society of Antiquaries, printed in the *Archæologia*, vol. xxix., p. 223.

from which I take much of the information contained in the present article.

The Roman ware made in the Upchurch potteries presents distinctive peculiarities which cannot be mistaken, and it must have been in great repute, certainly the next after the foreign Samian and the native Durobrivian wares, in this province of the empire. Like the Durobrivian, too, it has been found, I believe, on Roman sites in France and Germany, so that it was probably exported. As Battely has described it, the greater proportion of this ware is of a "blackish colour," or rather of a bluish or greyish black, which was produced, no doubt, by the process of the smother-kiln, already described in our paper on the Durobrivian pottery. Some of the Upchurch pottery presents a colour approaching to dark drab. Examples of both are given in our plate. The forms, as well as the sizes, vary greatly, but they all present those delicate forms of the curve which we recognize at once as coming from the hands of the Roman artist. The texture of the pottery itself is fine, and it is very thin. The ornamentation also is varied, but not very elaborate, or very refined. One of the most elegant patterns is represented in the first figure in our plate. It consists of a band of half-circles, made with compasses, from each of which a band of parallel lines descends vertically. Another example of this class of ornament is given in one of the groups (2) in our accompanying woodcut. A pattern different from this, but still presenting some of the same characteristics; is shown in the lower figure to the left on our plate. This, again, both in form and in the character of its ornament, though it is more simple, may be compared with No. 4 in the cut. The little vessel (3) in the front of the cut has had two handles, but one is lost: it is supposed to be an incense pot.

The instruments used in the ornamentation of this pottery appear to have been of a very rude description, and were, as it seems, chiefly mere sticks, some sharpened to a point, and others with a transverse section cut into notches. The former were used in tracing the lines already described; the latter had the section formed into a square, or rhomboid, the surface of which was cut into parallel lines crossing each other, so as to form a dotted figure, and this was stamped on the surface of the pottery in various combinations and arrangements. An example of this description of ornament is given in the upper vessel to the right in our plate. Sometimes these dots are arranged so as to form bands, as in the example in the back of the group in the woodcut (5). The middle figure in our plate represents another ornament, which is more difficult to describe, but which is not uncommon. The large urn in the middle of our group in the woodcut (1) furnishes an example

of another kind of ornamentation found on the Upchurch pottery, formed by parallel intersecting lines. In its shape, this vessel has much the appearance of a sepulchral urn. A considerable quantity of this pottery is without ornament at all. Among this unornamented pottery are found especially jug-shaped vessels, commonly with a handle, like that represented in the last figure in our plate. Two similar vessels are represented in our woodcut (8 and 9); in which I give also a curiously-shaped plain urn (7), and an unornamented vessel of another form (6).

At different spots over the locality which was covered by these potteries, Mr. Roach Smith has found remains which indicate the former existence of kilns, and further researches will most probably bring to light some of the kilns themselves. Traces have also been found of the residences and of the graves of the potters. There appears to have been a more extensive settlement—a potters' village, or little town—on the higher ground, bordering the marshes at Halstow. "In the Halstow marshes," Mr. Roach Smith observes, "I noticed, at a particular spot, a considerable quantity of tiles and stones, which I could not positively identify as having been used in buildings; but adjoining the church, near the creek, there are abundance of fragments of tiles of various kinds, that clearly show the locality to have been the site of buildings, which, if we may judge from their *débris*, must have been tolerably extensive. On the sides of the church, facing the creek, an embankment has been thrown up to protect the land from the sea; this defence is filled with broken tiles and pottery, which also literally cover the shores. The church itself, probably of Saxon origin, has a large quantity of Roman masonry worked into the walls, and in a field west of the church, in the side of a well sunk for water, for purposes of brick making, I noticed a tier of Roman tiles, which appeared to be part of a hypocaust."

ARCHÆOLOGIA.

At the recent meeting of the British Archæological Association at Durham, under the presidency of the Duke of Cleveland, the Rev. Prebendary Scarth, of Bathwick, Bath, communicated a discovery he had recently made in Gainford Church, in the county of Durham,

of a ROMAN VOTIVE ALTAR, which had been used for material in building. It was dedicated to Jupiter Dolichenus. Several altars have been found in Britain dedicated to Jupiter under this name, which is said to have been derived from Doliché in Macedonia, where there were extensive iron mines. This makes about half a dozen Roman inscriptions to Jupiter Dolichene found in this island, and, as we understood Mr. Scarth, he considers that they generally mark the neighbourhood of iron mines worked by the Romans, as being placed under the protection of the god under this character. Perhaps, however, we ought to take this suggestion with some reserve. It was a common practice with the Legionaries to dedicate their altars individually to the deities who presided over the native country of each, and in all these cases the altar, or votive tablet, may have been offered by a soldier who came from the district of Doliché. The presence of mines in the localities where they are found is easily accounted for. We know that the Roman mines were worked by men generally of bad character, condemned criminals, degraded slaves, and others, whom it must have required an armed force to hold in check, and there were no doubt small military posts in their neighbourhood. It may be added, that the stone on which this inscription was cut has been somewhat mutilated and defaced, and that, although Mr. Scarth's explanation was perfectly satisfactory as far as it went, a part of it has not yet been fully deciphered.

The ROMAN REMAINS found on the brow of a cliff at FILEY in Yorkshire in 1857, and described in a brief paper by Dr. W. S. Cortis, were brought for exhibition at the meeting at Durham. They were numerous, and of a miscellaneous character, consisting of upwards of forty coins, in third brass, of the later emperors; of a quantity of bones and pottery, among which was one fine vessel of the Durobrivian ware; of oyster, limpet, and mussel shells; and of various other articles, among which were several legs of fighting cocks, showing that the well-known love of the Romans for cock-fighting had reached even this remote corner of the earth. Much charred wood was found scattered about, and other indications of burning, so that whatever building had stood on this spot, apparently a watch-tower or lighthouse, had perished in a conflagration. Five square bases of columns were found, arranged in a parallelogram, which measured seventeen feet by fourteen, one at each corner, and the fifth in the centre, which had evidently supported a superstructure. A smaller column, on the northern side, seemed to indicate the position of a doorway. Close to the eastern stone a bit of shale was found, which had broken off a larger piece, in the middle of the one side of which was drawn a large A, with scrawls which appeared to have no meaning. On the other were parts of two lines of an inscription, of which the following words remain:—

CÆSAR SE
QVAM· SPE

It has been written probably by some individual in mere playful-

PLATE 4.

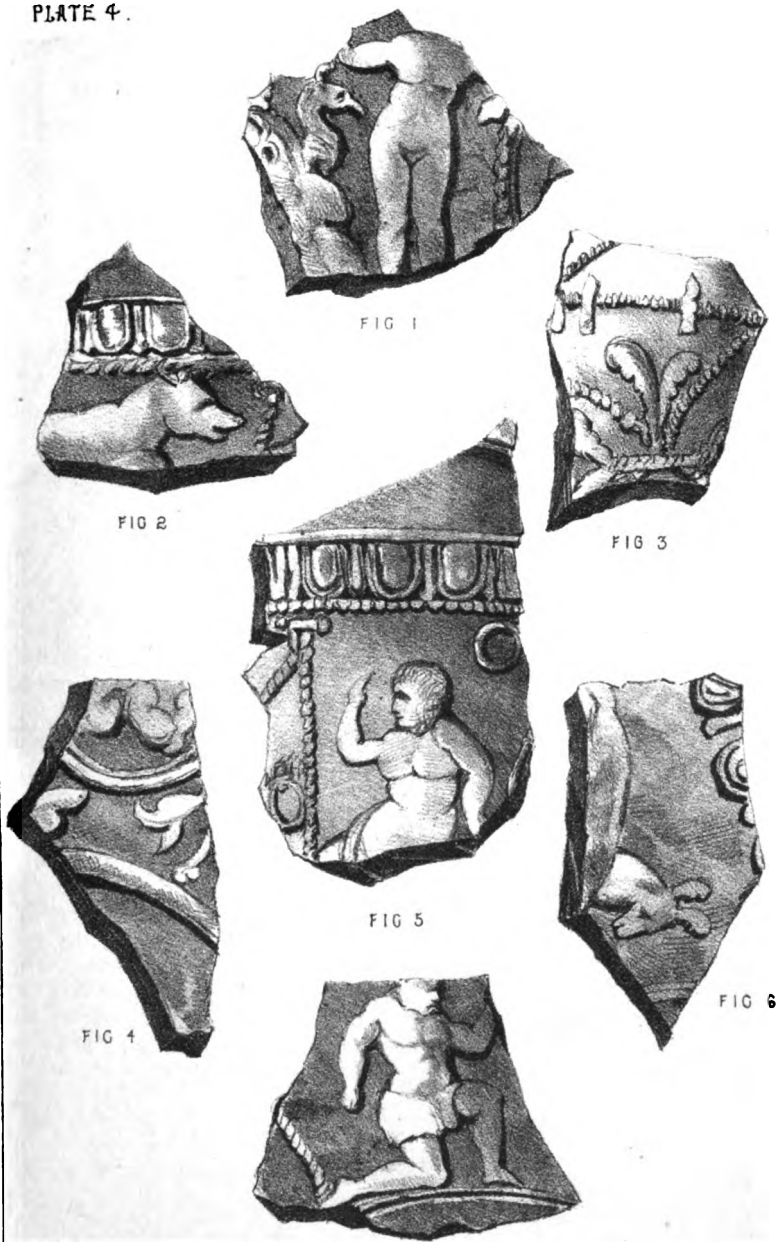
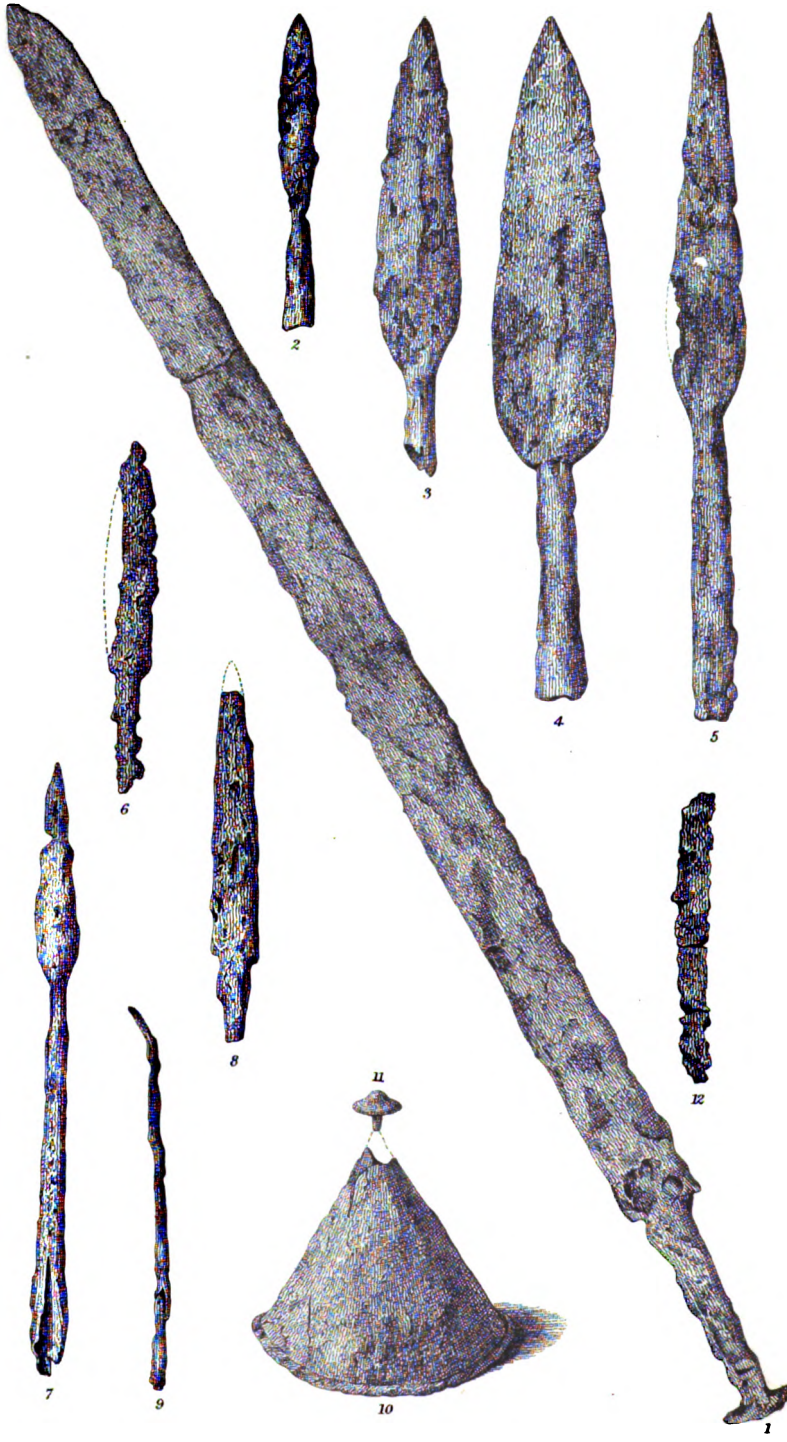


FIG 7
RATHER LESS THAN FULL SIZE

ROMAN POTTERY FOUND AT WALTON-LE-DALE



IRON WEAPONS FOUND NEAR ASTWICK.

E. W. Deer, del.

[*From the* 'Transactions of the Hertfordshire Natural History Society,' Vol. IV, Part 2, July, 1886.]

AN ACCOUNT OF BRITISH AND ROMAN REMAINS FOUND IN THE NEIGHBOURHOOD OF HITCHIN.

By William Ransom, F.L.S.

PLATES II-V.

In the spring of 1879 my attention was drawn to a slightly-raised circular plot of ground on Pegsdon Common, at the foot of the Chalk downs, about four miles from Hitchin. I had it opened in company with a friend, Mr. F. Latchmore. Trenches were dug across it, and at a depth of about a foot from the surface we came upon a considerable number of broken urns of brown pottery of the usual type found in Roman burying-places, some of them being in a fair state of preservation, and containing cremated human bones. There were also several pieces of the red ware, formerly called Samian, but now supposed to have been made at Arezzo in Italy, and at other manufactories in France and Germany, while the finest quality only came from the island of Samos. Pliny tells us that Arretum, or Arezzo as it is now called, was famous for its dinner-services, and Surrentum, the present Sorrento, for its cups. In a few cases the Samian ware bore traces of having been mended with rivets of lead or other metal, in the same manner as we were accustomed to repair valuable old china until the discovery of 'diamond cement,' indicating the great value attached to this description of pottery. The brittleness of this ware is frequently referred to by classic writers.

Under these Roman remains, from 2ft. to 2ft. 6ins. in the ground, were a large number of ruder urns of very coarse material, about $\frac{3}{8}$th of an inch in thickness, and extremely friable, so that it was impossible to remove them from the earth without their crumbling to pieces. They were probably British, of an earlier manufacture, and were hand-formed, not turned on a wheel like the Roman ware, and they were probably merely sun-dried, or very slightly baked. Like those above them, they contained human ashes, mixed with pieces of wood and charcoal, and iron nails. These would be gathered up with the bones after the body had been burned on the funeral pyre.

A few feet from this spot was a mound of greater elevation, on digging into which we came upon a perfect human skeleton in a slightly sitting posture. Judging from the unusual length of the bones, the skeleton must have been that of a man not less than 6ft. 4ins. in height, and the skull was of a superior type. An iron knife close by had evidently fallen from his left hand. From his weapon being buried with him, and also from the shape of the skull, I have no doubt but that he was a Saxon, and a man of some note. The Romans did not usually bury their implements of warfare with the dead, whether cremation was practised or not. A special interest attaching to this discovery is, that the three races should

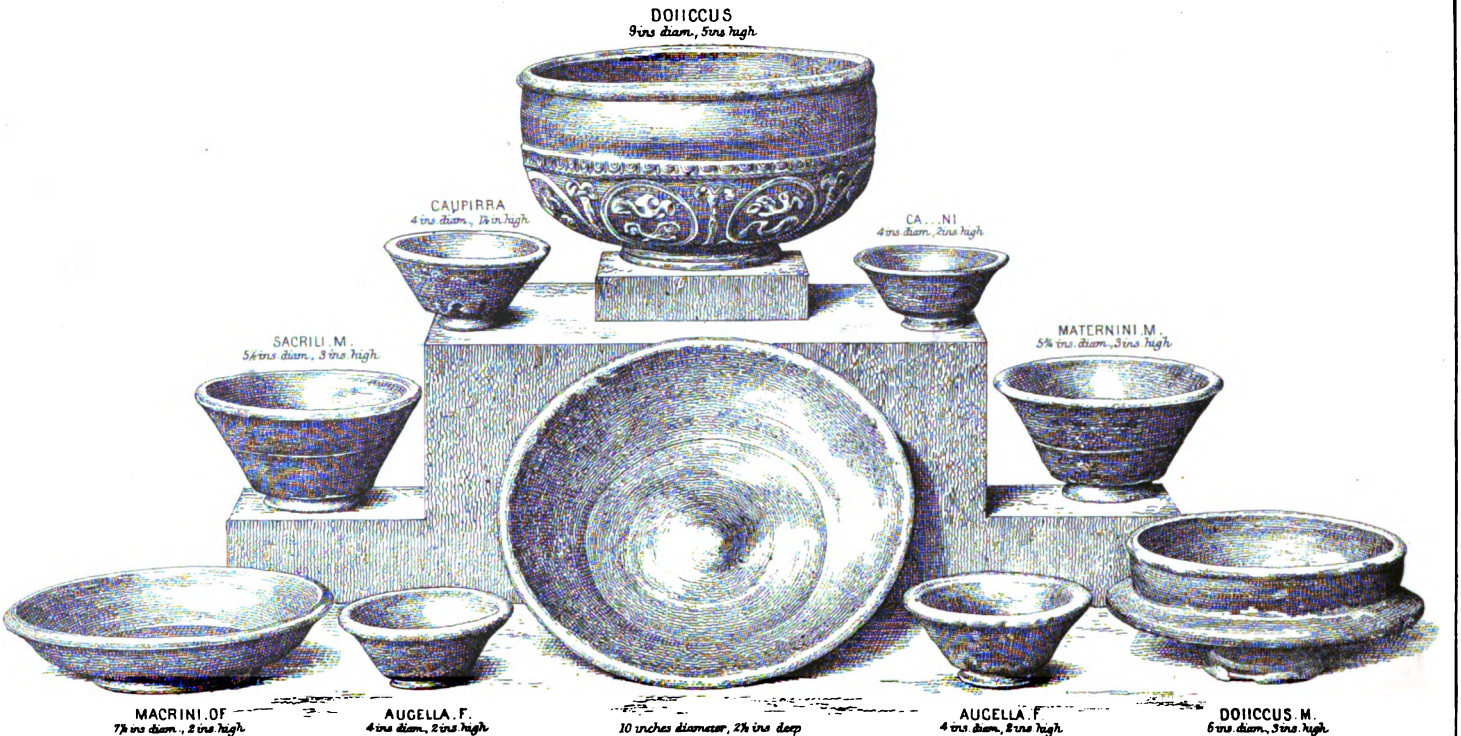
have chosen the same place for burial, indicating a superstitious feeling connected therewith, and it is a little strange to our ideas to find the ashes of the conquerors resting upon those of the conquered, yet suggesting the happy thought that after death all former difference is at an end. The Icknield Way is about half a mile from this site.

In a field near, known as Dane's field, there were found about forty-five years ago a large number of human skeletons, and also those of horses, with several fragments of iron and bronze. These were probably of more recent date than the cinerary urns found in the cemetery already described. The bodies might have been those of men killed in battle, and hurriedly buried without the usual care bestowed upon an ordinary interment. Within a short distance an almost perfect Roman amphora three feet high has been dug out, and a variety of other vessels have since been found there. It may be interesting to note by the way that the pretty purple *Anemone Pulsatilla*, known as Danes'-blood, grows abundantly on the hill-slopes around, covering the scanty herbage with its purple blossoms in the early spring. It is an object of attraction to our botanical friends far and near.

Three or four miles eastward, near Astwick, in digging for coprolites, a large number of human skeletons were disinterred, and near these were ten Samian vessels, all quite perfect, with the potters' names distinctly legible on most of them. Three of the names had not previously been recorded. The large bowl exhibited, with a raised pattern of fishes, etc., running round it, is an unusually fine specimen of its kind. These vessels are additionally interesting from having the impression of the tips of the maker's fingers, made after he had applied the glaze, distinctly visible underneath each, thus indicating the exact position in which they were held on placing them in the oven to harden. A sword and a number of spear-heads, with divided haft, indicative of Saxon workmanship as distinguished from the usually welded haft of the Roman weapons, were also found. One of these is of a very unusual type. There was also a boss of a shield, which was in fragments, but, when cleaned, the pieces were easily put together.

In 1878 a number of bronze celts were found about two feet below the surface in a field near Cumberlow Green, and with them a quantity of rough metal for casting into implements. They are of similar character to those which are distributed almost all over Europe. They are almost as hard as steel, and they would, with their sharp edge, prove formidable weapons. These are pre-Roman, belonging to a period antecedent to the use of iron in England.

On the 6th of March, 1882, a workman, whilst engaged in draining land near Great Wymondley, a mile and a half east of Hitchin, turned up an earthen vessel of Roman ware. This induced me to make further search, and we soon discovered the first distinct trace that is known of a Roman settlement in that immediate neighbourhood. Within a space of five yards by seven yards were disinterred forty-three cinerary urns of various sizes, shapes, and colours, from



SAMIAN WARE FOUND NEAR ASTWICK.

black to pale yellow, containing burnt human bones, charcoal, and iron nails. Accompanying each urn was a Samian dish and a wine-bottle, some of these being full of liquid, but possessing none of the flavour of the famous Falernian wine. By the side of one of the urns there was a baby's feeding-bottle, thus touchingly indicating that the ashes of a mother and infant rested in the larger vessel, and illustrating the care that was then taken in providing even for the anticipated need of the spirit of the little babe whilst being ferried over the river Styx under Charon's charge. Some of the Samian dishes retained the metallic rivets with which the fractured pieces had been joined, still holding them together. I do not know of any other description of Roman ware that had the same care bestowed in mending it. Of the whole number of vessels, many were so hopelessly crushed that it was useless to attempt to restore them. No two vessels were exactly alike. Several other small vessels—some of elegant shape—which had probably belonged to the departed, were also buried with the urns. Whether the relatives of the deceased were prompted in this by the thought that they might again be used in the spirit-world, or by a superstitious idea in regard to the property of the departed, can only be matter for conjecture. It is easy to recognize much of the pottery, of which we picked out no fewer than forty-five varieties distinct in colour and texture. Several ancient kilns having been found in various parts of England, with the ware still standing on the shelves in the ovens, we are enabled to determine where the different varieties were made. One of the most famous of these was discovered about sixty years since at Castor, in Northamptonshire, the ancient Durobrivæ.* A specimen of this ware was found near Hitchin, with its device in high relief, and similar pieces are constantly found in many parts of England. Hunting-scenes formed a favourite pattern on the better class of the Castor vessels. In connection with pottery I may mention that at Sandy, the ancient Salinæ, an iron implement with serrated edge was dug up, the teeth being alternately set in opposite directions. I was puzzled to understand its use, until, turning out a piece of pottery near, and comparing the indentations upon it, I found that they corresponded exactly with the marks which would be made with the teeth of the implement.

A line of black earth in another part of the field at Wymondley, extending from north to south across it, was perceptible. This was carefully excavated, and it seems to have been a ditch into which all sorts of broken or rejected articles of domestic use were thrown. There were heaps of Samian ware, several pieces of Castor, some of Upchurch, made on the banks of the Medway, and also pieces of New Forest pottery, strainers, and parts of six mortaria, lined with sharp pieces of flint or small pebbles, to facilitate the work of trituration. A strigil, a bent metal implement with which the attendant slaves scraped their masters after leaving the bath,

* The name Durobrivæ is also known as that of a town of the Cantii, the present Rochester.—Ed.

was also found; and there were many nails and spikes, a key, knives, horse-shoes, some pieces of bronze, and Colchester or probably Richboro' oyster-shells, the contents of which formed a favourite dish with the Romans. In reference to their appreciation of mollusks and crustaceans, Juvenal, in his Fourth Satire, writes of Montanus, a court sycophant, much addicted to the pleasures of the table, that he knew how to discern at the first bite whether an oyster had its birth-place at Circeii or on the Lucrine rocks, or whether it was a native of the Bay of Richborough, and at sight of a crab could tell at once what shore it came from.

We also came upon fragments of Roman glass, pieces of querns or millstones, and volcanic lava. This last I believe to have been used along with the ordinary clay of the district in making common earthen vessels. Analyses of pottery from Pompeii and Rome show it to contain volcanic earth, and favour this suggestion. Hones for sharpening knives, etc., stone weights, and cores from the horns of oxen, believed to be those of the extinct *Bos longifrons*, of which the black Welsh cattle are supposed to be descendants, bones of horses, sheep, and hogs, a large number of knuckle-bones which were used as dice, a quantity of Roman bricks and roofing-tiles of the usual red colour, and some Roman coins, were dug out; these were much defaced by the action of the soil, and their inscriptions rendered illegible. Many coins have been picked up at various times in this field, dating from Vespasian, A.D. 69, to Julianus, A.D. 360, almost continuously. The following is a list of these coins:—

	A.D.		A.D.
Vespasian	69–79	Tetricus	267
Nerva	96–98	Tetricus, Jun.	267–272
2 Antoninus Pius	138–161	Allectus	293–296
Marcus Aurelius	161–180	2 Constantine	306–337
Postumus	258	Crispus	317–326
2 Gallienus	253–268	Constantinus II.	337–340
Salonina, wife of Gallienus.		Julianus	360–363

We next dug in a pasture separated from the other field by a lane. In the south-west corner is a double mound; this we opened, but found nothing more than broken dark pottery and a quantity of burnt earth on a surface which had been beaten down hard. Possibly some sacrifice had been offered there, and the mound four feet in height raised over it. In various parts of this field were lines of stone, about 2ft. deep, running at right angles to one another, probably the foundations of a house, or other buildings, but no mortar was present; this may have perished by the dissolving away of the lime constituent. Fragments of pottery and Samian ware were turned up in almost every part of the quadrangular enclosure, which can be distinctly traced from the raised ground and trenches encircling it, measuring about 20 acres.

Mr. Seebohm, in his book, 'The English Village Community,' thus describes this little Roman holding:—"It consists now of several fields, forming a rough square, with its sides to the four points of the compass, and contains, filling in the corners of the

square, about 25 Roman jugera—or the 8th of a centuria of 200 jugera—the extent of land often allotted to a retired veteran with a single yoke of oxen. The proof that it was a Roman holding is as follows:—In the corner next to the church are two square fields, still distinctly surrounded by a moat, nearly parallel to which, on the east side, was found a line of black earth full of broken Roman pottery and tiles. Near the church, at the south-west corner of the property, is a double tumulus, which, being close to the church field, may have been an ancient 'toot hill,' or terminal mound. In the extreme opposite corner of the holding was found a Roman cemetery," etc.

Before taking leave of the Wymondley cemetery, these beautiful and touching lines of Horace to his friend Septimius when he points to the spot where he wished his own ashes to be laid, may be appropriately quoted ('Opera,' Lib. ii, Ode 6):—

> "Ille te mecum locus et beatæ
> Postulant arces; ibi tu calentem
> Debita sparges lacrima favillam
> Vatis amici."

The words "*cum lacrymis posuit*" are frequently found on ancient epitaphs, and it is recorded that a glass bottle supposed to be filled with tears has occasionally been found in an urn.

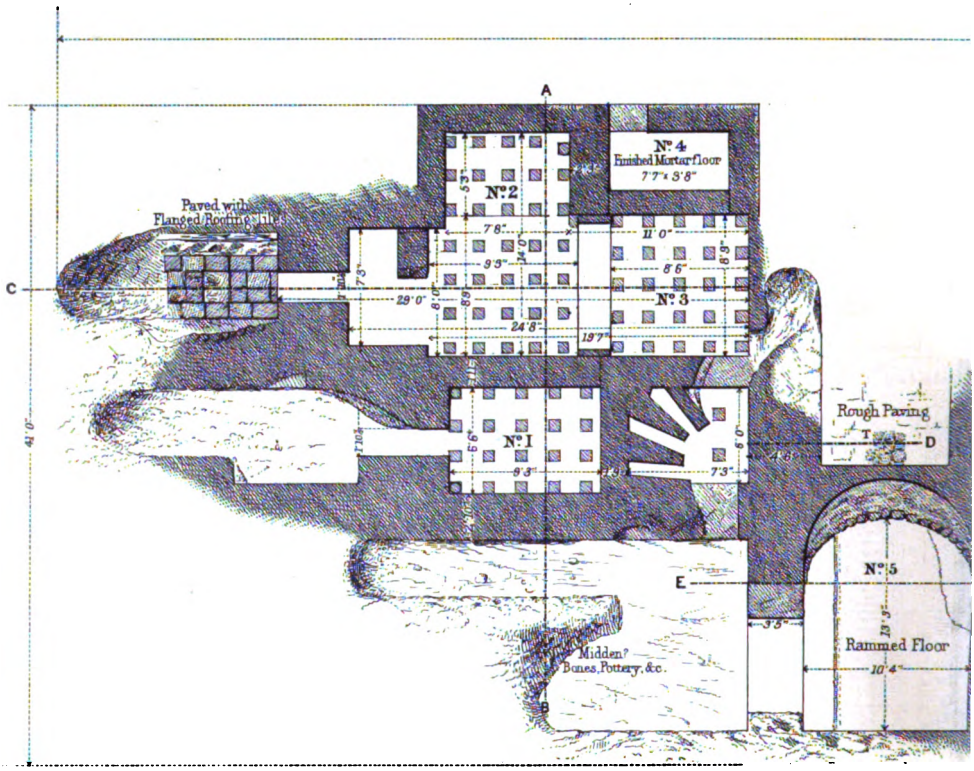
Some time after desecrating the ancient burying-place, which had for so many centuries been undisturbed except by ordinary agricultural operations on the soil above it, and which was held so sacred under the Roman law that any one disturbing graves was liable to instant death if discovered, my attention was called by the tenant of the neighbouring farm to the number of pieces of brick lying on the surface of the ground in a field some three furlongs distant, near Purwell Mill. On walking over it, I picked up numerous fragments of pottery, small tesseræ, and large pieces of bricks and tiles, evidently of Roman make, possessing the close texture and bright red colour peculiar to the period. Wherever these are found in the ruins of buildings or walls, whether at St. Albans, Brading, Silchester, Cirencester, Wroxeter, Bignor, Colchester, or on the Continent, as near Ems, Trèves, Nismes, etc., they are usually of the same hue, bright red. Scattered about with the above were chipped flints and flakes, with pieces much resembling those set in wood for making the tribulum or threshing-sledge for rubbing out the grain, and from which our word 'tribulation' is derived. There is an excellent specimen of this implement in the museum at Salisbury.

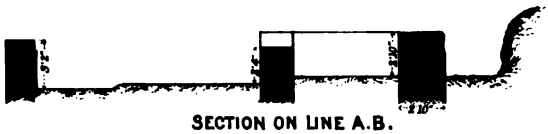
On seeing these fragments, I came to the conclusion that the remains of a villa and perhaps its farm-buildings might be found buried beneath the soil. On mentioning this circumstance to Mr. William Hill, a member of our Society, he coincided with me in this view, but it was not until November, 1884, that we set to work in earnest to search for foundations. We were rewarded by pitching upon the right place at the first trial. Only some 15 inches beneath the surface we found quantities of bricks, rubbish, and faced flints,

with the wall of a Roman building *in situ*, and at a depth of 2ft. 6ins., we came upon the concrete floor of a room. The præfurnium, or furnace, was next disclosed, and then the flues leading to the hypocausts, used for heating the floors, these being supported on pilæ or columns of eight square bricks or tiles, about 13ins. in height and 14ins. apart. On these were laid square flooring-tiles, which were then covered with a thick layer of concrete containing a large amount of broken brick or burnt clay. We cleared out three rooms of this description: No. 1, measuring 9ft. 3ins. by 6ft. 6ins.; No. 2, 9ft. 3ins. by 14ft.; and No. 3, 8ft. 9ins. by 8ft. 6ins. These, I am disposed to think, were used as baths, or possibly might have been the winter quarters of the family. If the former conjecture were correct, No. 1, being nearest the furnace, would probably be the sudatorium, or Turkish bath; No. 2, the laconicum, or vapour bath; and No. 3, the tepidarium, or warm bath. A narrow passage led to the other part of the house, the first room (No. 5 on plan) having an elliptical alcove at the end. This might be the basilica or room used either for worship, or for conducting the business of the establishment. On either side of the alcove, outside the building, was a stoned or paved floor, which may have been the remains of the porticus or covered walk, and immediately opposite to which would be the principal garden. The floor of this room was 14ins. thick, of fine concrete, and so hard that in ascertaining its thickness we had almost to drill through it, and on striking it with a hammer the implement rebounded with great force, the concrete being as hard as, or harder than, our strongest cement. The adjoining room (No. 6) was covered with a nearly perfect tessellated floor of an unusual but simple pattern, red, with parallel white lines, and gridironed in the centre. No. 7 was a rectangular room 19ft. 3ins. long by 14ft. 3ins. broad, and beyond this, parts of two others were distinctly defined, until the floors cropped out to the surface of the land, and we were unable to trace more, although I believe the villa extended some considerable distance beyond in a northerly direction. My opinion that we only laid bare a small part is confirmed by archæologists who have had much experience in this direction.

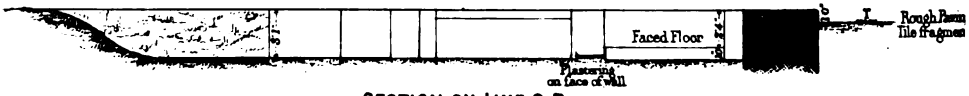
It was interesting to notice that considerable alterations had been carried out in the building since its original erection, as at the point A, where a new præfurnium had been added, the entrance to which was floored with large roofing-tiles, perhaps from some outbuilding which had been taken down. In room No. 2 a division-wall had been built across, apparently to reduce its size. The inferiority of the later building-material was very marked, the mortar not being nearly so hard as that originally used, and without the admixture of powdered clay or brick, indicating a decadence in the art of building, which we are told commenced in Italy about the time of Augustus.

The herring-bone walling in No. 3 chamber, with the radiating bricks visible in the west face of the divisional wall, is a good specimen of Roman work. This system of walling prevails in most





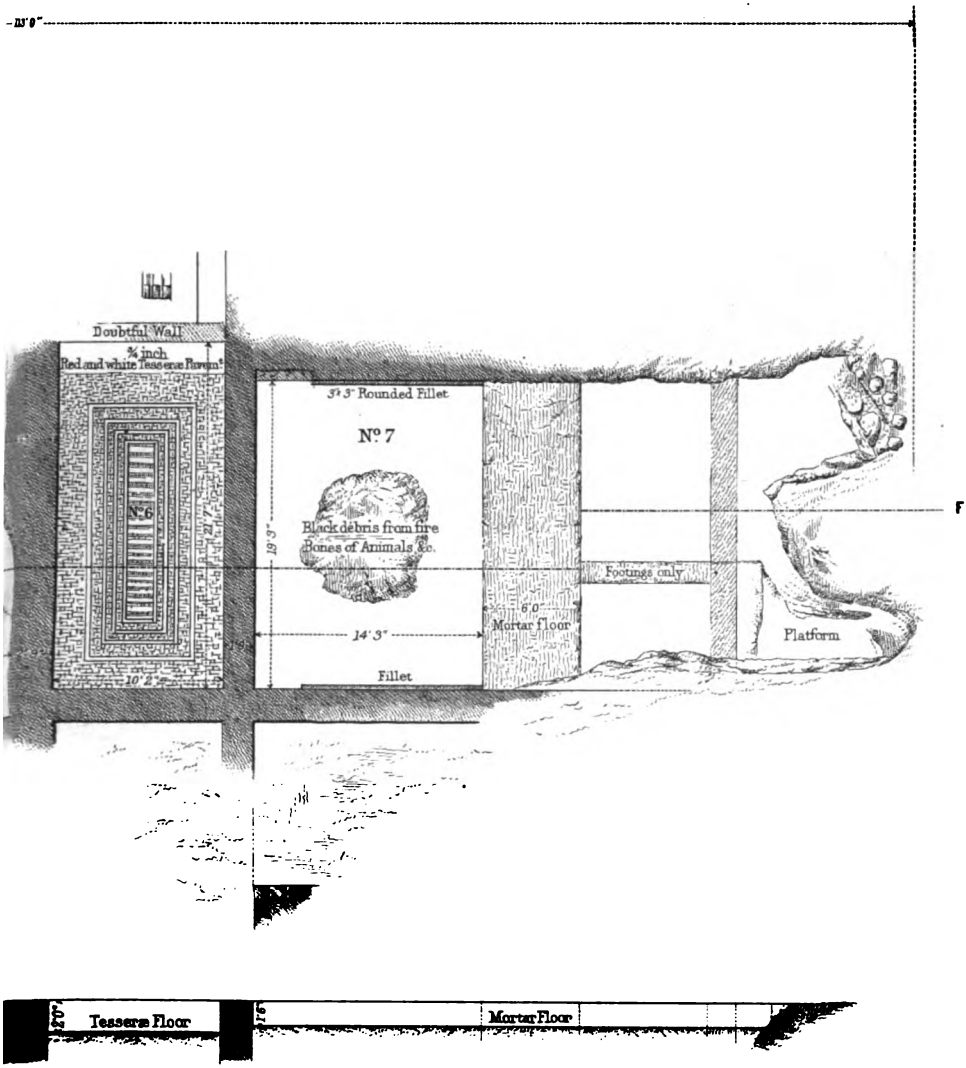
SECTION ON LINE A.B.



SECTION ON LINE C.D.

Scale, ½ Inch to a Foot.

10 9 8 7 6 5 4 3 2 1 0 10 20 30 Feet



SECTION ON LINE E.F.

PLAN OF

ROMAN VILLA

excavated near Hitchin, Nov. 1884

on the estate of C.W. Wilshere, Esq.

E. Weller, lith.

Roman constructions, and is illustrated to a great extent in the walls of Silchester, a few miles from Reading. All the walls were strengthened at the angles with courses of tiles, and in other parts similar courses and sometimes single tiles were laid in for bonding and levelling-up purposes. Structural alterations were noticed in several other parts of the building. One remarkable feature was the presence of charcoal and ashes in the centre of most of the rooms, even that in which was the tessellated pavement being in this way blackened and injured. Around were scattered bones of oxen, sheep, red deer, swine, goats, and birds, with quantities of oyster-shells; also a few bones of the fox, but none of the hare or rabbit. Probably the antipathy to hares, which Cæsar mentions in his description of Britain, held good then in the same way as it exists still among some of our population in certain parts of the country. From the untidy state of the floor, we may be justified in concluding that after the original occupants had been driven from their abode by another set of invaders, some semi-barbarous tribe took possession and dwelt there, that they kindled fires on the elaborately-designed tessellated floors in the centre of the rooms, to warm themselves and cook their food, and, gnawing the flesh off the bones, threw these aside, after extracting the marrow, as the marrow-bones were cracked longitudinally.

Considering the alterations which had been made from time to time in the villa, and the gradual decadence in the quality of the material used at each change, it must doubtless have been occupied for a long period, and this view is further confirmed by the wide range in the dates of the coins found in and around the ruins, commencing with Severus, A.D. 195, and almost continuous up to Valens, A.D. 375, probably the time of its occupation by its last Roman owner. Upwards of 40 coins came into my hands, and there were others besides which did not reach me. The following is a list of the coins which I know to have been found in and around the villa:—

COINS FOUND IN THE VILLA.

		A.D.			A.D.
	Gallienus	253–268		Allectus	293–296
2	Victorinus	265–267		Constantine	306–337
	Tetricus	267	2	Valentinianus II.	375–392
	Tetricus, Jun.	267–272		Three barbarous imitations of Roman coins.	
	Carausius	287–293			

COINS FOUND IN THE FIELD IN WHICH THE VILLA STOOD.

		A.D.			A.D.
	Severus	193–211	2	Constantinus II.	335–340
	Gallienus	253–268		Crispus	317–326
	Salonina (wife of Gallienus)		2	Constans	335–350
	Victorinus	265–267		Constantius II.	335–361
	Tetricus	267		Magnentius	350–353
	Tetricus, Jun.	267–272		Gratianus	378–383
	Claudius Gothicus	269–270		Valentinianus	375–392
	Carausius	287–293		Valens	364–378
	Allectus	293–296		Several barbarous imitations of Roman coins.	
4	Constantine	306–337			

Many cart-loads of broken roofing, flooring, and flue-tiles, together with faced flints, were thrown out in the rubbish from the excavation.

The paint or fresco on the walls retained in places the colour as brightly as when first put on, and, while most of the ornamentation was in straight lines, there were some rude indescribable devices. In one case the wall, with the plaster uninjured, was within seven inches of the surface, which is still more remarkable, and proof of the excellent quality of the building-material, as the soil is wet, and the land has been tilled by the plough for ages.

In addition to the articles already mentioned there were found in the *débris*, bone pins, a band for ladies' hair, pieces of glass vessels of fine quality, window-glass and thick bottle-glass, iron nails, an iron gouge, a style for writing on wax, rubstones for sharpening knives, with oxide of iron still adhering, oyster-shells from the best natives (?), a key, pieces of bronze, and a pretty little bronze steel-yard for weighing small articles, perhaps the precious metals or medicines, similar to those now in use at market-stalls; also Upchurch ware from Kent, mortaria of white Lyons ware, and a curious perforated lid, which was probably the top of a scent-jar. Amongst the bones were also found, at the depth of three or more feet, a number of the pretty little spiral shells of *Achatina acicula*, which are frequently turned out where animals have been buried. This mollusc has a peculiar perception as to where its food lies, for its shells are occasionally found at a depth of 7 or 8 feet in human graves.

From the extent of this villa and the substantial way in which it was built, there can be no doubt but that it was once the residence of a person of some distinction, and was chosen for its salubrious position. It is interesting to note its proximity to remarkably fine springs of water, welling up from the chalk. Good and clear water was a first consideration in choosing a site for a residence, and Vitruvius tells us that the ancients used to "examine the livers of beasts which fed where they designed to build, which, if they found vitiated, they attributed it to bad water or pasturage, and concluded it would not fare better with themselves if they should settle there, as their own diet must be of those beasts, and they would be obliged to partake of the same water."

In addition to pure water, other luxuries attached to Roman villas were fishponds and places set apart for the breeding of snails and dormice, both of which are often mentioned in connection with Roman cookery. The places in which they were kept, called Cochlearia and Gliraria by Varro, are thus described by him: "A proper place in the open air is to be provided to preserve snails, which you must compass all round with water, that you may find those you put there to breed, as well as their young ones. I say they are to be encompassed by water, that they may have no opportunity of escaping. The place may be made dewy by bringing in a pipe and fitting small cocks to it, which may eject the water so as to make it fall upon some stone and diffuse itself widely." "The

Glirarium is managed in a different manner, being surrounded by walls, not water. The whole is covered with stone or plaster within, to prevent the dormice from creeping out. There ought to be trees in it, that may bear acorns, but when they do not bear fruit, you must throw within the walls acorns and chestnuts for them to feed upon. You must make large holes for them to breed in." *Helix Pomatia*, which still abounds on our Chalk, is said to have been imported by the Romans.

An apiary was absolutely necessary, as honey was much in request, and was used for much the same purposes as we now use sugar. Virgil, in his fourth Georgic, describes the wonderful qualities of the bee, and gives the following description of an apiary:

> "First for your bees a quiet station find,
> Devoid access of the all-insulting wind,
> Their haunts secure from sporting kids and sheep,
> Which morning dew from flowers and blossoms sweep.
> Muskins and other birds infest the hive,
> Far from your bees enamelled lizards drive,
> The swallows catch them flying, then convey
> To their expecting young the luscious prey."

Then, describing stones which he recommends should be placed in water to enable the bees to drink, he says:

> "The bees will on these frequent bridges stand,
> And to the sun their glittering wings expand,
> The verdant lavender must there abound,
> There savory shed its pleasant sweets around,
> There beds of purple violets should bloom,
> And fragrant thyme the ambient air perfume."

An osier-bed was also thought very desirable, probably to provide baskets in which to pack presents for sending to friends.

All these might easily have been provided on this site, with a terrace round the house, a sloping lawn, at the side of which the box-tree was cut into the forms of various animals, a place for practising chariot-exercises, a farm-house, a park, a kitchen-garden, and many other surroundings of a Roman country house.

Besides the places already mentioned I should refer to Wilbury Hill, a commanding position on the Icknield Way, about 2½ miles N.E. of Hitchin, where traces of an ancient camp are distinctly visible, with a rampart formerly surrounded by a ditch. Many relics have been found here from time to time, including a few coins. There is also a large tumulus very near. On the site of the residence of Mr. W. T. Lucas, at Foxholes, half a mile west of the town, several Roman antiquities were recently dug out, consisting of bronze armlets and ornaments, fibulæ, Samian dishes, knives, and several cinerary urns; also skeletons, one being of gigantic size and supposed to be that of a man nearly seven feet in height.

On Bury Mead, close to Hitchin, whilst it was being prepared for sewage-disposal, several Roman bottles and pots and a few coins were found. On the chalk hills, about 4½ miles to the west, is an unusually perfect entrenchment, named Ravensburgh Castle, en-

closing some twelve acres of land, and rising abruptly from a deep ravine; this is probably an early British camp, though commonly attributed to the Danes. I have not heard of Roman or Saxon remains having been found on the site, which surely would have been the case had the camp been used by either as a post for defence, but possibly further explorations might expose some to view. Small worked flint implements are frequently picked up in and around the enclosure. I have also found around my own residence at Fairfield, Hitchin, many pieces of ancient British pottery, and urns containing cremated bones.

I believe the whole of the higher ground in this district was at one time thickly populated with its ancient inhabitants, and then by the Romans, whose coins are universally distributed throughout the district.

EXPLANATION OF THE PLATES.

Plate II.

Iron Weapons found near Astwick. Scale one-fourth natural size. Fig. 1. Sword. Figs. 2-6. Spear- and lance-heads (fig. 4 of unusual shape). Fig. 7. Dart. Fig. 8. Knife. Fig. 9. Bent rod, use unknown. Fig. 10. Boss of a shield. Fig. 11. Probably tip of boss. Fig. 12. Pin passing through boss at base and forming the handle of the wooden shield. (See p. 40.)

Plate III.

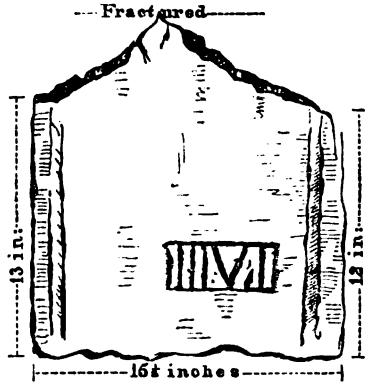
Samian Ware found near Astwick. From a photograph. Scale about one-fourth natural size. The names given are the potters' marks, as far as they can be made out. (See p. 40.)

Plate IV.

Roman Pottery found at Great Wymondley. From a photograph. Scale about one-eighth natural size. The potters' marks can only be made out on three of the dishes, as indicated. (See pp. 40-41.)

Plate V.

Foundations, floors, and parts of walls of Roman Villa discovered on land belonging to C. W. Wilshere, Esq., near Purwell Mill, between Hitchin and Great Wymondley. From a plan drawn by Mr. Henry Hodge, Architect. Scale one-twelfth of an inch to a foot. (See pp. 43-47.)



ON AN INSCRIBED ROMAN TILE RECENTLY FOUND IN LEICESTER.

BY THOMAS WRIGHT, F.S.A.

In the course of excavations made in the year 1854 in Bath Lane, in Leicester, the workmen found, among other relics of the Roman town of Ratæ, a broken Roman tile, which presented in itself no particular interest. It was an ordinary roof-tile, flanged at the sides, measuring in breadth fifteen inches and a half, and in its present condition, for it is broken at one end, twelve inches on one side and thirteen on the other in length. When perfect, it perhaps formed nearly a square. On examination, however, this tile was found to bear stamped on its surface a legionary mark of considerable interest in regard to the history of our island under the Romans; considerable, I may state, only on account of the very faint glimpses history has spared us of the events which occurred in Britain from the second to the fourth century. It may be taken, indeed, as a very good example how relics of apparently little importance may often throw great light on our primeval antiquities, and how cautious we ought to be in despising or rejecting anything. To explain the interest of this old broken tile, it will be necessary to review briefly the history of the Roman legions employed in conquering and retaining this distant province of the empire.

It is hardly necessary to state that the military force of Rome was originally divided into a certain number of legions, the strength of each varying at different periods from four thousand to six thousand infantry, with about three hundred cavalry. In Cæsar's first expedition to Britain, he brought with

him two legions, which were, as we learn in the course of his narrative, the seventh and the tenth. In his second expedition he brought five legions with him; we know, from an incidental mention of it, that the seventh legion was one of them, and the tenth also probably accompanied it, but the names of the other three are unknown. As on the former occasion, these legions were all withdrawn on Cæsar's departure, and Britain was not again visited by Roman troops until the accession to the empire of Claudius, who, in the year 43, sent Aulus Plautius into Britain at the head of four legions, which are known from various authorities to have been the second, ninth, fourteenth, and twentieth. The first of these was commanded by Vespasian, the future emperor, and they seem to have been all what we should now term "crack regiments," proud of their reputation, and, under the influence of this pride, very ready to mutiny. Under the proprætorship of Sultonius Paullinus, the ninth legion only appears to have been left in the south, while the three others were employed, under Suetonius in person, on the borders of Wales, the second legion being especially occupied in establishing itself in the country of the Silures. At this time, no doubt, the Roman town of Isca, now Caerleon, in Monmouthshire, was founded, as well as Deva or Chester, the former to be the head-quarters of the second legion, the latter of the twentieth. It is well known that in the revolt of Boadicea, in the year 61, the ninth legion, which had attempted alone to arrest the progress of the insurgents, was nearly destroyed, and that Suetonius hurried to suppress the insurrection with the fourteenth and twentieth legions, leaving the second in the country of the Silures. Two thousand soldiers were sent from the continent to recruit the ninth legion, but, as far as we can judge from the accounts of what it had suffered, this number must have been very insufficient. The civil commotions which soon disturbed the Roman empire, prevented the arrival of further recruits during some years, while, besides other troops which were carried away from Britain to assist in the struggle for power, the whole fourteenth legion was carried to Italy by Suetonius Paullinus to support Otho against Vitellius, the latter being, as it appears, universally unpopular among the soldiers in this island. When Vitellius had secured the empire for himself, he was probably glad to remove the brave and not very loyal fourteenth legion to its distant province, and it returned to Britain with the new proprætor, Vettius Bolanus; but when Vespasian, who was personally known to the legions in this island, and was as popular among them as Vitellius was detested, sought to obtain the imperial purple, the fourteenth legion crossed the channel to assist him, and left Britain in A.D. 69, never to return. The number of

Roman legions in this island was thus reduced to three, the second, the ninth, and the twentieth.

All that we know of the subsequent movements of the Roman legions in Britain, which is very little, is gathered from one or two slight allusions in the Roman writers, and from inscriptions found on monuments which have been from time to time discovered on sites those legions had permanently or temporarily occupied. These inscriptions generally are of three kinds, those on tomb-stones, or dedications of altars, etc., or inscriptions relating to buildings which they had erected or repaired. The tomb-stones, commemorating only the deaths and burials of individuals, are but of secondary value, because the fact of the death and burial of an officer or soldier of a legion in a certain place does not necessarily imply that the whole legion, or even any considerable part of it, was there. The votive monuments are of more value; but the most important of all for our purpose are the inscriptions recording work performed by the soldiers. The Roman legions, in this respect unlike the troops of modern times, were never allowed to be idle; when not engaged in hostilities, they were employed on public works, such as making roads, throwing up fortresses, and erecting public buildings of various descriptions, and they commemorated their labours by inscribed tablets of stone, on which in some cases (especially in building defensive walls of great extent) the quantity of work performed by each detachment was stated, or by stamping merely the name of the legion on the tiles or bricks used in the construction. These last mentioned inscriptions are found in great abundance on the sites of the towns which were occupied by the legions.

When Julius Agricola undertook the conquest of the Caledonians, he no doubt carried with him to the north the three legions then in Britain. He was himself the commander of the twentieth legion, and we learn from Tacitus that the ninth legion took part in the decisive campaign against Galgacus in the year 83. This legion appears never to have recovered the losses it had sustained in the war against Boadicea, and it is described by Tacitus as being at this time weaker than the others; yet it was unfortunate enough to be left in an exposed position, where it was surprized and almost cut to pieces by the Caledonians. After this event, the ninth legion disappears from history, and the effective legionary force in the island appears to have been almost reduced to the second and twentieth legions. But when, in the year 120, the Emperor Hadrian repaired into Britain in person to put a check upon the attacks of the formidable Caledonians, he brought with him another legion, the sixth, which had been previously established on the borders of Germany. The emperor had with him in the north, with

this new legion, the second and the twentieth, for numerous ascribed monuments still attest the work performed by each of these three legions in the erection of the great wall which by his orders was carried across the island from the Solway to the Tyne.

I must now speak of another peculiarity of the Roman military system, namely, the custom of establishing the different legions through the various parts of the empire in permanent quarters, which the same legion continued to occupy until the empire itself was broken up. We trace, in the narrative of Tacitus, the second legion establishing its quarters in the country of the Silures as early as the middle of the first century, and the twentieth was no doubt stationed at Deva about the same time; while inscriptions found at York leave little doubt that that city, called by the Romans Eburacum, was the station of the ninth legion, which had probably been placed there as a check upon the incursions of the Caledonians. The entire disappearance of the ninth legion after Agricola's last campaign in the north, has been explained by the probable supposition that Hadrian found it so greatly reduced in numbers that he incorporated it with the sixth legion, which he had brought with him from Gaul; and this, again, will explain why the quarters of the sixth legion were subsequently established at Eburacum. In the geography of Ptolemy, usually ascribed to the year 120, and apparently compiled very soon after the date of Hadrian's visit, these three legions only are enumerated as being then in Britain, the second legion at Isca (*Caerleon*), the sixth at Eburacum (*York*), and the twentieth at Deva (*Chester*). Tiles, with the legionary stamps of the second and twentieth legions, have been found in some places in Wales, and probably mark stations at which detachments of those legions were often posted, for reasons with which no historical records have made us acquainted; but the three legions just enumerated were never moved from their permanent head-quarters, until the time when the imperial authority was withdrawn from the island, and we have no account of the presence of any other legion in Britain. When, in the reign of Antoninus Pius, twenty years after Hadrian's expedition, the proprætor, Lollius Urbicus, marched against the Caledonians, he took with him all the legions in Britain, and the numerous inscribed slabs commemorating the building of portions of the great line of defence known as the wall of Antoninus, which have been found from time to time, make us acquainted with the share each of these three legions, and no others, performed in it. In the struggle for empire which ended in the elevation of Severus to the purple, in A.D. 197, the troops in Britain supported the claims of Albinus, and some portion at least of the legions went over to

the continent to fight in his cause; but they appear to have returned to their old quarters soon after his defeat, for in the record which is known by the title of the *Itinerary of Antoninus,* and which is supposed to have been compiled about the year 320, we still find the second legion at Isca, the sixth at Eburacum, and the twentieth at Deva. About a century later, on the eve of the final withdrawal of the Roman legions, when the official work known as the *Notitia Utriusque Imperii* was drawn up, it appears from that important record that the twentieth legion had already been withdrawn from the island, and that the second legion had been removed from Isca to Rhutupiæ (*Richborough,* in Kent), probably on its way to the Continent, but where it remained under the disposition of the count of the Saxon shore; but as the sixth legion is there stated to be under the disposition of the *dux Britanniarum,* whose authority extended over all the garrisons in the north of Britain, it no doubt still remained in its quarters at Eburacum. None of these records intimate the presence of any other legion in Britain.

It must thus be a matter of some surprise when we find a monument recording the presence of the eighth Roman legion at Ratæ (*Leicester*); yet such is the case with the tile of which we are speaking, and which, with its stamped inscription, is represented in the accompanying cut. This inscription is easily read as L.VIII. The letters are, as will be seen, reversed, which is not very unusual on the stamps of the legionary tiles, and is explained without difficulty. The stamps for the pottery, and for other articles for sale and for domestic purposes, were engraved deliberately and with care on metal or stone, because they were intended for permanent use; but when the soldiers of a legion were proceeding to the erection of a building, and made the tiles for it, they probably cut their stamp hastily on a piece of wood for the occasion, and at times a worthy soldier thus employed forgot that what he thus cut on the stamp would be reversed in the impression. Examples of similar reversed inscriptions on the Roman tiles, made by soldiers of the second legion, will be found in Mr. Lee's excellent and valuable "Catalogue" of the antiquities collected in the Museum at Caerleon, recently published. The form of the letter L is another peculiarity of this stamp, for, though it is found in other inscriptions, it is not very common. It occurs in the inscription on an altar dedicated to the Deæ Matres found at York, the date of which is uncertain. It is also met with in an interesting Roman inscription on the rock of the Roman stone-quarries on the bank of the river Gelt, near Brampton, in Cumberland, which is engraved and described by Dr. Bruce, in his well-known work on *The Roman Wall* (page 64 of the second edition).

This inscription also is the work of legionary soldiers, and informs us that it was made by men of the second legion, when they were employed in quarrying here in the consulship of Flavius Aper and Albinus Maximus, which fixes the date to the year 207. It appears, indeed, that this form of the letter L was in use during the third century. It may be further remarked, that the peculiar character of this monument of the eighth legion has its significance. A mere tablet might have implied simply that the legion in its march had halted to raise or repair some work of defence; but a tile, and that a roof-tile, marked with the name of the legion, shows that the soldiers were employed in erecting buildings of a different character, and those buildings were most probably for their own accommodation. They were, in all probability, barracks. The tile thus furnishes strong evidence that the eighth Roman legion was stationed for some time at Ratæ, or Leicester, probably at some period in the third century.

We are not very well acquainted with the history of the movements of the eighth legion. It appears to have been stationed on the borders of Germany, and Mr. Roach Smith, in the second volume of his *Collectanea Antiqua* (page 140), enumerates tiles bearing its stamp found at Niederbieber, on the Rhine, which show that it was at some period stationed there. We have no intimation in any historical record of the sending of this legion into Britain, and the date and object of its visit are, therefore, left entirely to conjecture. If it had come over hither with Severus, it would hardly have been left at Ratæ, but would more probably have been taken to the north; and we have no reason for supposing that that emperor brought a legion over with him. But the latter part of the same century was the age of Carausius and Allectus, and when Constantius came over in 292 to restore the rebellious province to the empire, and had need of a very formidable army (as the three legions in Britain would be arrayed against him), it is extremely probable that he brought even more than one legion over with him. The eighth legion was ready at hand, as Germany and Gaul were in his division of the empire. Constantius, victorious, established his residence at Eburacum (*York*), which was now considered as the military capital of Britain; and as he came not to meet a foreign enemy, but to restrain a rebellious population, it is not at all improbable that, during his stay here, which ended only with his death, he may have stationed a legion at Ratæ.

Thus, in this inscribed tile, accidentally preserved, we have, perhaps, the only monument remaining of one of the most interesting events in the annals of our island during the Roman period, and one of which the history is very obscure, the re-

conquest of the province by the Emperor Constantius, the father of that Emperor Constantine who went from Britain to make Christianity the State religion of the Roman empire. How many such monuments, in appearance worthless, but which might have assisted in throwing great light on the history of our country, have been destroyed through the ignorance of those who happened to find them! It ought surely to be a warning to us to be cautious in rejecting or neglecting any relic of antiquity, because it may appear at first sight of small value or of trifling importance.

ORGANIZATION AND LIFE.*

FROM the earliest ages of speculative thought, the human mind has occupied itself with the vast and perplexing questions of organization and life; but notwithstanding centuries of experience to show the proper limitations of such an inquiry, it is still rare to find a writer or an investigator who will adhere to an inductive method, and abstain from mingling the guesswork of mere hypothesis with the pursuit of experiment, or the elucidation of fact. An inquiry into organization necessarily belongs to the domain of physical science, and demands physical methods of procedure, which are incapable of dealing with elements of a purely metaphysical kind. Physical science reveals a wondrous order and harmony of forces and arrangements, extending through all the time and all the space with with which we are acquainted; and as our minds take cognizance of such facts, we are irresistibly led to the contemplation of an Intelligent First Cause. Let us, however, distinctly understand that it is not a mechanical process, a chemical process, or a physiological process that conducts us to this result; all that the physical sciences do is to give us information, about which we cogitate according to the laws of thought, and thus arrive at a perception of their connection with a class of powers that no physical methods can reach. The apparatus of the chemist, the scalpel of the anatomist, the microscope of the minute inquirer, or the telescope of the astronomer, cannot be employed without displaying to us the results of Will, Intelligence, and Design; and yet it cannot be said that it is through them that we learn the primary truth concerning the Source and Origin of all the phenomena which Nature presents. An

* *La Vie et ses Attributs dans leurs rapports avec la Philosophie, l'Histoire Naturelle et la Médecine*, by L. Bouchut, Médecin de l'Hôpital Sainte Eugénie. Professeur agrégé de la Faculté de Médecine, Chevalier de la Légion d'Honneur, Baillière.

inquiry into life requires the combinations of physical and metaphysical methods, because under the term life we include things which differ as widely as human emotion and the development of an egg. We say life is one, and we say nature is one, but we do not mean to assert that there is no difference between a granitic mountain and a shooting star, nor ought we to forget the distinction that separates the function of digestion from an impulse of the mind. To call life a *principle* is to place ourselves on the highroad to confusion, because we start with a definition which assumes a knowledge that we do not possess; and we moreover jumble together a variety of causes and effects.

A principle means a *beginning* of some kind. The principles of a science are those elementary facts and conceptions which form its foundation. In another sense, a principle is a first cause. We likewise find that principle is often used to signify not a sense, but a nonsense, and thus we hear of the "electrical principle," the "caloric principle," the "vital principle," or any similar phrase intended to give ignorance a learned look. If we take life to mean all the acts and properties exhibited by living beings, our first business is to separate them, and study each class in an appropriate way. The phenomena that belong to physical science will have a physical cause for their appearance; and a physical cause is not a volition, or an intelligent power, but simply a condition, or assemblage of conditions, that are invariably followed by another state of things that we call an effect. If we ask *why* there is this invariable link between certain antecedents and certain consequents, physical science cannot tell; and it is a metaphysical science that resolves the difficulty by pointing to that Intelligence which is the Great Cause of all.

Those who are curious to study the history of opinion on the question of vital manifestations will find it ably traced in Barclay's *Life and Organization*, and it is interesting to note that, so early as Empedocles, a bold effort was made to avoid the confusion into which investigators are still apt to fall. According to that philosopher every animal possessed a rational and a sentient soul, the former derived from the gods, the latter from the four elements of which it was imagined that the universe was composed. In this rude hypothesis there is an attempt to separate the phenomena of organic life from those of consciousness, which we do not find in M. Bouchut, the latest writer on the same subject, who tells us that "by *vital force* matter *feels, moves*, and assumes *forms* more and more complicated, from the creation of vivifiable organic matter to the most completely organized being." This same "vital force" which has bewildered so many subtle heads, M. Bouchut considers he has "de-

Mr. J. E. Price, F.S.A., communicated the following note on a discovery of old pottery, found near Colney Hatch.

I have some hesitation in troubling the members with this communication, but this being the last meeting of the present session, I wish to direct their earliest possible attention to a discovery which, though quite in its infancy at present, may ultimately prove of considerable interest, and is one which I think especially comes within the province of that Ethnographical Committee to which I have the honour to belong.

A few days since I received a note from our friend, Mr. F. G. H. Price, F.G.S., to the effect that a gentleman resident at New Southgate had, in the course of his geological investigations, come across Roman pottery and other relics in the immediate vicinity of his residence. Mr. Price was kind enough to suggest that I should give some attention to the discovery, so we accordingly visited the locality together, having first communicated with Mr. King, to whom we are indebted for the loan of the few objects exhibited. We found the site to be that of a gravel-pit situate at the extreme end of a road well known to the residents as Cock Lane, which lies some half a mile or so eastward of the railway station (on the Great Northern Line) usually known as Colney Hatch, but now called New Southgate. This road or lane is one of the direct highways to Edmonton, and is situate in that parish. To the left is the old village of Southgate proper, and to the right the tract of country which includes Wood Green, Tottenham, and Hornsey, and so on into London. In this gravel-pit, well known by the "Southgate" gravel which it produces, and at a depth of about four feet from the surface, the workmen discovered large quantities of animal bones associated with broken pottery, burnt wood, and other objects. Of the bones I do not feel myself qualified to speak. Mr. Price tells me that they are mostly those of the *Bos Longifrons*, and, if so, are such as are frequently found on Roman sites. Of the few pieces of pottery there can be no question; though fragmentary there is sufficient to at once distinquish them as Roman. There are also a few pieces of air-dried ware which we may even assign to British work. Mr. King possesses also a curious stone object, drilled through the centre, evidently for suspension; this may have formed portion of a necklace or other decoration, and is evidently of a very early

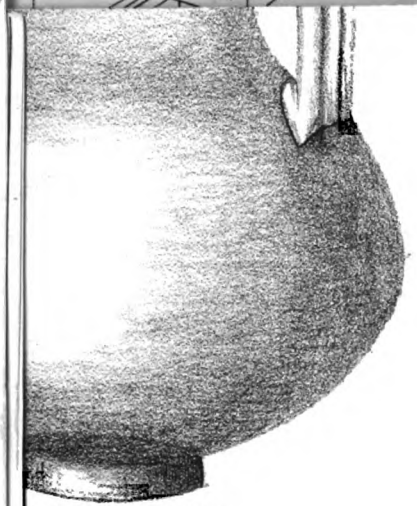
character. Of the geological features of the site, Mr. Price, from the hasty examination we were able to give, was of opinion that the vegetable soil reposed on drift gravels, formed of rounded and subangular chalk flints and quartzites, intermingled with chalky clay and sands. These gravels were of considerable thickness. Here and there were evidences of water-springs, the pebbles over which the water coursed being smeared with what he considered to be black oxide of manganese.

The interest, which as it seems to me attaches to the discovery, is the unquestionable data which it affords as to the presence of the Romanised Britons in this locality, a fact which at least possesses novelty in our knowledge of this portion of the county of Middlesex. So far as I am acquainted, there have never been found any traces of the Romans even in the immediate district. The origin of the little village in the neighbourhood is of no great antiquity, and Colney Hatch itself, though a large place now, was, as late as the reign of Henry VII, merely possessed of perhaps a dozen houses. The district was comparatively uninhabited—indeed, no situation existed for the construction of buildings or the requirements of residents; the district was close to Enfield Chase upon the north, and must have been skirted by richly wooded forests, with but few signs of human occupation.

It is not my intention to offer at present any particular theory to account for these remains. There will be no difficulty in prosecuting researches as excavations proceed, and it may be that other things may be found which may render speculation at present undesirable. It is possible that human bones may be discovered, and that we thus can assign the deposit as being one of sepulture; but at present all that are found have been animal remains, which, accompanied by the charred wood, has rather a sacrificial aspect than otherwise. Or it may turn out that this isolated deposit which, by the way, is in *strict accordance with Roman regulations*—the bones, fire and pottery—may be connected with the early limitation of the great "territorium" or county of Middlesex, and there may consequently be a connection between it and the hundreds of Ossulstone and Edmonton.

It is sufficient to say that the entire district is worth investigation. The etymology, for example, of Colney Hatch, Southgate, and Bounds Green, requires some elucidation.

I have only to add that both Mr. Price and myself will be happy to keep the matter before us, and, with the assistance of Mr. King as a resident on the spot, we trust that when our meetings are resumed we may be enabled to give a more interesting report of our labours.



SORIUM RESTORED.
(11. inches high)

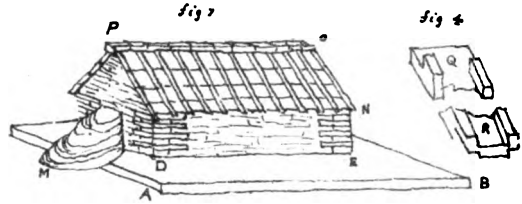
1. Glass Ossorium in fragments
2. Glass Lachrymatory
3. Bronze Coin
4. Plain Vase
5. Ornamented Vase
6. Large Pitcher
7. Inverted Pitcher
8. Patera ..... DIFVSVS
9. Simpulum .... ALBVCI
10. Patera ..... MIC:10·I
11. Simpulum ..... ILUOMRIN
12. Iron Lamp
13. Fragments of Iron and Carbon
14. Fragments of Unburnt Bones.

CHAMBER IN ROMAN BARROW,

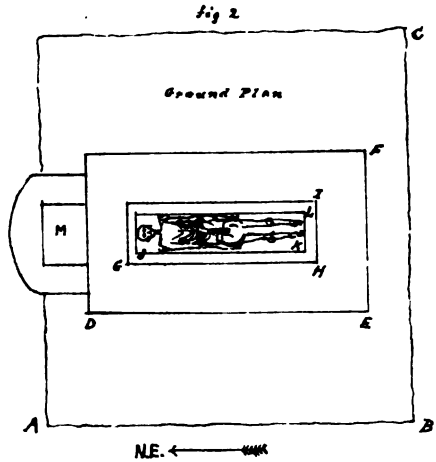
Opened at

ROUGHAM, SUFFOLK,

15th September, 1843.



Perspective View



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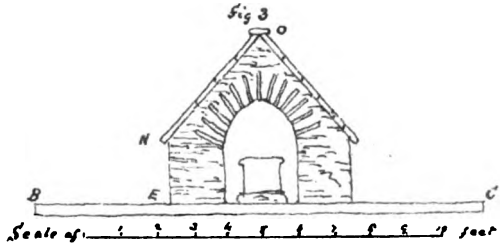

COWELL'S ANASTATIC PRESS, IPSWICH.

ROMAN ANTIQUITIES

FOUND AT ROUGHAM IN 1843 AND 1844.

DESCRIBED IN TWO MEMOIRS,

BY THE LATE

REV. J. S. HENSLOW, M.A.,

Professor of Botany in the University of Cambridge, and Rector of Hitcham. Suffolk.

REPRINTED, WITH

AN INTRODUCTION AND NOTES,

BY

CHURCHILL BABINGTON, B.D.,

Disney Professor of Archæology in the University of Cambridge, and Rector of Cockfield, Suffolk.

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ROMAN ANTIQUITIES FOUND AT ROUGHAM

in 1843 *and* 1844.

THE Roman antiquities discovered in the barrows at Rougham have been described by the late Rev. Professor Henslow, M.A., in two separate accounts, published in 1843 and 1844. The earlier memoir was in the form of a pamphlet, entitled *An Account of the Roman Antiquities found at Rougham, near Bury St. Edmund's, on the Fifteenth of September*, 1843. *Sold for the benefit of the Suffolk General Hospital*, MDCCCXLIII. It is dated Hitcham, October 2, 1843, and is printed by Gedge and Barker, 26, Hatter Street, Bury. The later account was originally inserted in the *Bury Post* as a letter to the editor, headed *Opening of the Tumulus at Rougham*, and was accompanied by three figures; it is dated Hitcham, July 12, 1844. This was also printed off separately, and entitled *The Roman Tumulus, Eastlow Hill, Rougham, opened on Thursday, the 4th of July*, 1844. The more important parts of these papers have been reprinted in the Rev. L. Jenyns' *Memoir of the Rev. Professor Henslow*, pp. 222—230. Lond. 1862.

It having been determined by the Committee of the Suffolk Institute of Archæology and Natural History that these accounts should form part of the transactions of our Society, they were entrusted to my editorial care. Upon the whole, it seemed best to re-print the text as it stood, without omission or alteration, adding here and there a note where any qualification or additional information appeared to be required. My own notes are distinguished from those of the author by being enclosed in square brackets. There is little doubt that the lamented Professor would have re-cast or omitted some things, in his later memoir at any rate; but, as they occupy no great space, and as all abridgments by any other than the author's hand

are justly regarded with suspicion, I have preferred to allow them to remain in their original form. A few words may now be said by way of introduction respecting the present state of the barrows, and of the antiquities found therein.

On June 7, 1871, I visited the ground occupied by the four barrows mentioned in the following papers, and had some conversation with an old man, named Thomas Parish, whose house is close to the large barrow, at the opening of which he was present, when it was examined by Professor Henslow. This barrow, rather elliptical than circular, is about four times larger, to speak roughly, than the only one of the three smaller barrows now remaining. It rises about 17 feet above the surface of the ground, and is covered with various kinds of herbaceous and woody vegetation. The tunnels made in it in the summer of 1844 still remain open, and the interior is approached through a door, of which the key is kept at the house of Parish. The tiled building can be seen *in situ*, the roof still remaining in part covered, and in the interior the bones of the corpse are laid out; the skull, however, and the leaden coffin have been removed—the former to the Anatomical Museum, the latter to the Fitzwilliam Museum, at Cambridge.* A few broken tiles, with upturned edges (flange-tiles), are lying near the building on the ground. Two of them I measured, which gave about 14 in. for the length and 11½ in. for the breadth of the perfect tile. Concentric circles are disposed irregularly on their surfaces. There are also fragments of hollow, nearly square-formed

* Leaden coffins have been found at Lincoln, London, and Colchester (Gough, Sep. Mon. i. p. xlv.). Thoresby has recorded the discovery of two at the beginning of last century, in the Roman burial-place near Bootham Bar; one, 7 ft. long, enclosed in planks of oak, fastened by large nails; the other unprotected by wood. Two lead coffins, recently discovered in excavating for the railway station (York), were without any remains of a wooden enclosure—one like a sheet of lead, wrapped round the body, 6 ft. 6 in. in length; the other, a small, oblong chest, without a lid, 2 ft. 9 in. long, 12 in. wide, and 11 in. deep, the corners not soldered or in any way fastened together. Both are in the Collection of the Yorkshire Phil. Soc. (Wellbeloved's *Eburacum*, pp. 112-3. York, 1842. 8vo. Akerman's *Archæol. Index*, p. 65 pl. ix. Godwin's *Engl. Arch. Handbook*, p. 51. Oxford, 1867.) See also the Collection of Romano-British Antiquities in the British Museum.

flue-tiles, about 6 in. wide and 5 in. deep. The surface is incised with masses of parallel lines, inclined at various angles to each other. I did not observe any of the tiles, whether loose or *in situ*, to be inscribed. Parish informed me that some of these fragments were not found in the barrow itself, but in a garden near.

With regard to the three smaller barrows, the one nearest to the large one, mentioned by Professor Henslow as containing the square urn of green glass, has been carted away, and has left no mark behind to indicate its site. The urn was removed to Rougham Hall, where it still remains. It is a very large example of a common type. The iron lamp is likewise preserved at the Hall.

The barrow next to this, in which the tiled cubical chamber was found, whose description is given at length in Professor Henslow's earlier memoir, still remains, showing the trench cut through the middle of it, which is left open. The larger diameter of this slightly elliptical barrow is, according to my measurement, about 56 ft., and the present height something less than 5 ft. It is covered with turf. The antiquities found therein were presented by Mr. Bennet to the Bury Museum, and are placed in a model of the original chamber.

The third barrow, in which Professor Henslow found a few fragments of pottery, has left so little trace of its existence, that Parish said he knew nothing about it. I have no doubt that a slight elevation of surface, at a little distance below the second remaining barrow, still indicates its site, which was already much obliterated in 1843.

The most interesting of the smaller antiquities is the glass ossorium, found in the second of the smaller barrows. Professor Henslow observes that it is unlike any of the vessels figured in the papers to which he had referred. It is also unlike any glass amphora which I remember to have seen, or of which I have been able to discover a figure.*

* Mr. Akerman (*Archæological Index*, plates ix., x.) gives figures of many of the forms of Roman glass found in this country. Others will be found described or figured in Mr. C. R. Smith's *Collectanea*, and *Illustrations of Roman London;* in Mr. Lee's *Isca Silurum*, Mr. Scarth's *Aquæ Solis*, Messrs. Buckman's and Newmarch's

Dr. Birch informs me that the British Museum does not contain any Roman glass amphora of a precisely similar form, though it possesses two or three which approach it in some respects.

Of the other forms of glass and pottery it is unnecessary to say much; Professor Henslow has generally referred to figures either identical or very similar. It may be added that the collection of the Cambridge Antiquarian Society comprises similar pieces among those which were found at Litlington, in Cambridgeshire, and Water-Newton, in Huntingdonshire. Several, if not all of them, are also found in the Colchester Museum. None appear to be rare.* Upon the dark red ware, commonly called Samian, but probably for the most part of Gaulish and German fabric, are potters' names, three of which can be distinctly read, besides one which is faint. The Rougham specimens possess the rare merit of not having been broken.

(1) ALBVCI. The name of this potter occurs on Samian ware found in Stoke Ashe, in this county, which was exhibited at the local museum, at Earl Stonham, at the excursion of the Suffolk Institute, July 11, 1871. Also in London (C. R. Smith, *Ill. Roman Lond.*, p. 102); at Caistor (Artis, *Durobrivæ*, t. 46); and at Chesterford, Essex (Hon. R. C. Neville, *List of Potters' Marks on Samian Ware in his Collection*, p. 1); likewise at Douai, in France (Smith, as before, p. 107); and elsewhere on the Continent (Froehner, *Inscr. terræ coctæ vas.* p. 3. Gotting., 1857).

(2) MICCIO F. Also on London Samian (Smith, as above, p. 105); and on the Continent (Froehner, p. 59).

(3) ILLIOMRIN. Ditto (Smith, p. 104).

The remaining name is difficult, not to say impossible, to be read. Professor Henslow thinks it may be BIFVSA or

Corinium, and in the catalogues of various local museums and transactions of learned societies. But a comprehensive account of Roman glass is yet to be written. A fine glass amphora, containing bones, was found at Geldestone, Norfolk, in 1848. It is figured in *Archæological Journal*, vol. vi. (1849), p. 110, and Mr. Yate observes that the Rougham urn "presents much general resemblance" thereto; but has a much wider neck, and more massive handles.

* The blue-black vessels marked 4 and 5 on the plate are, I believe, examples of the Upchurch ware.

DIGVSA, or something else. The name most like it in Dr. Birch's Catalogue of Samian Potters is ATVSA (*Anc. Pott.*, vol. ii. p. 410); Mr. Wright mentions an ALBVSA, which is nearer still (*Celt, Roman, and Saxon*, p. 68). But the true reading of the Rougham patera probably remains to be discovered; the last three letters alone are certain.

In conclusion, it is to be observed that these discoveries are mentioned by Mr. Wright (*The Celt, the Roman, the Saxon*, p. 312, Lond., 1852), who calls the large barrow "a very remarkable one;" and after him by Mr. Godwin (*English Archæologist's Handbook*, pp. 49—52, Oxford and London, 1867), who speaks of the "most distinguished" Roman Barrows in Britain being those at Bartlow and Rougham, and of the Rougham sepulchral chamber in the large barrow as being "the most remarkable" example of a "very rare" class, of which other instances have occurred at "York * and at Colchester." † These barrows, it may be added, were visited on July 26, 1869, by the members of the Royal Archæological Institute, which assembled at Bury St. Edmund's in the summer of that year.

CHURCHILL BABINGTON.

Cockfield Rectory, Oct. 1, 1872.

* The only sepulchral chamber of this kind known to have been discovered was found by some workmen in 1807 near the mount without Micklegate Bar. It is a small room, or vault, about 5 ft. below the present surface, 8 ft. long, 5 ft. broad, and 6 ft. high, the roof being arched, and formed of Roman tiles, each about 1 ft. square and 2½ in. thick. Inside was found a sarcophagus of a single great stone, covered with a flag-stone (blue), containing a skeleton. On each side the skull was found a small glass lacrhymatory. An aperture at N. end of vault is too small to have admitted the sarcophagus. The outer sides of the vault are not seen, except that by which visitors are now admitted, and where the workmen broke through. See Wellbeloved's *Ebur.*, p. 107.

The Rev. J. Raine tells me in a letter —"The sepulchral chamber is, I believe, pretty much in the state described in Mr. Wellbeloved's work. This is the only sepulchral room that I have heard of in the North."

† No similar sepulchral chamber is known to the Rev. J. H. Pollexfen or to Mr. Joslin as now existing there. The former observes: "The nearest approach to a sepulchral *chamber* of which I know anything in Colchester was the *tomb* formed of Roman tiles, discovered when making Beverley-road, and filled with those beautiful glass vessels now in the Colchester Museum, of which there is a description in their Catalogue, pp. 21, 22." This is probably what is intended by Mr. Godwin; but his remarks are upon chambers in which the body is buried *entire*.

An Account of the Roman Antiquities found at Rougham, near Bury St. Edmund's, on the Fifteenth of September, 1843. *By the* Rev. J. S. Henslow, M.A., *Professor of Botany in the University of Cambridge, and Rector of Hitcham, Suffolk. Printed by Gedge and Barker,* 26, *Hatter-street, Bury.*

Having been requested to prepare a Description and Drawing for Lithograph of the Antiquities discovered on the Estate of Philip Bennet, Esq., at Rougham, which he has kindly allowed to be exhibited at the Bazaar for the benefit of the Hospital, I must plead the despatch which has been necessary for making the model of the Vault, restoring the two glass Urns, and cleaning the Pottery, in extenuation of the imperfect character of my report; and I hope the professed Antiquary will not be severe in criticising the remarks of one who has no right to trespass on his domain. I have had no opportunity of referring to any other accounts which might have directed or assisted my judgment, than the four papers in the *Archæologia*, by the late J. Gage Rokewode, Esq., on the Barrows at Bartlow, and the paper by A. J. Kempe, Esq., on the *Ustrinum* at Litlington.

Easlow, or Eastlow Hill, is the name given to a large Barrow in the Parish of Rougham. The Saxon word Low signifies a Barrow. Three other Barrows of small dimensions range in a continuous line with the large one, trending from it in a S.W. direction. In July last, as some labourers were engaged in removing the earth which composed the most northerly of the three small Barrows, for agricultural purposes, they accidentally broke into a brick chamber, which appears to have been about two feet cubed. This chamber is stated to have been built with common Roman tiles and hollow flue-bricks; the latter being perforated either on one or two of the sides with a round hole. The roof is stated to have been composed of a single layer of large flat tiles. In this chamber were found a large iron

Lamp, with a short handle, and a very large and thick wide-mouthed square Jar or Urn of green glass, closely resembling the one figured by Mr. Rokewode in the *Archæologia*, vol. 1., pl. 32, fig. 1, and which was found in the largest of the Bartlow Barrows. The Rougham Urn was of still larger dimensions, being full eight inches square in the body, twelve inches to the shoulder, and sixteen inches high. The lip is five inches and a-half in diameter, with an opening or mouth of two inches and three-quarters in diameter. It contained a large quantity of burnt human bones. No other article is recorded as having been found in this instance, and the workmen positively assert there was nothing else.

The small Barrow next to this on the S.W. was opened on the 15th September, by digging a trench about four feet wide directly across the middle of it, and ranging nearly N.E. and S.W., or in the direction in which the Barrows themselves are arranged. Measuring through the trench to the extreme points where the earth begins to rise on either side, the diameter at the base is fifty-four* feet; and from the highest point down to the natural surface of the soil is nearly six feet. Immediately below the middle of the Barrow, and beneath the natural surface of the soil, was discovered a brick chamber or vault, which, from its containing burnt human bones, forms the description of tomb called *Bustum*. The floor, walls, and roof were formed of the same description of tiles, each of which, when perfect, was seventeen inches long, twelve broad, and two thick, and several of them were marked on one side and towards the edge with two slightly depressed intersecting circles, either stamped or traced out by a wooden or iron instrument. The floor on the inside was two feet two inches and a-half from S.W. to N.E., and exactly in the direction of the trench, and two feet one inch from S.E. to N.W. The walls contained five courses of tiles, set in thick layers of mortar. The roof was formed of five layers or courses of tiles laid horizontally, and so that each layer

* [So corrected in MS.; the printed text has eighty-two.]

lapped over the one below it, advancing about one and a-half or two inches until the opening was nearly closed, when the vacancy was filled with two narrow strips of tile, at the height of two feet three inches above the floor. There was a sixth layer of four tiles placed over the roof, and then upon the whole was loosely piled a quantity of broken bricks and tiles of different thicknesses. A layer of loamy earth was now thrown over this mass, so as to give it a uniform surface, somewhat domed or rounded above the level of the soil, and then came a final coating of pounded brick and mortar, which formed a smooth case to the whole.

The following articles were discovered in the *Bustum*:—

1. A handsome Urn (the *Ossorium*), of pale, bluish green glass, with two broad reeded handles, and an eared mouth. This is unlike any of the vessels described in the papers to which I have referred. It stands eleven inches high, the neck is four inches, and the diameter of the eared mouth five inches, with the opening three inches in diameter; and it has a foot four inches in diameter, and an inch deep. The body is nearly spherical, more than nine inches in diameter. This Urn had fallen to pieces, and the fragments (thirty-four in number) lay in a confused heap with the bones in the N. corner of the chamber. Several of the fragments had entirely disappeared, and those which were found are in a more or less advanced state of disintegration. It is very singular that every fragment which was recovered admitted of being placed in position, not one of them belonging to any inner portion of the vacancies. I think that one or two pieces must have accidentally been lost, but the others which are missing would have filled spaces where the glass has become so exceedingly thin, that we may readily imagine they had entirely disappeared. The manner in which the glass disintegrates is by peeling off in small filmy scales, thinner than the finest gold leaf, or even than a soap bubble; and a puff of the breath scatters them through the air in innumerable spangles, glittering with the colors of the rainbow. As these scales fortunately peel off

parallel to the outer and inner surfaces only, and not along the fractured edges, each fragment retains its original outline, and merely diminishes in thickness—so that they could be restored with precision to their proper places, though it was a work of some little labour to fix them, since many were not thicker than the glass in a common Florence flask.* Before the Urn fell to pieces, its inside had become partially encrusted with carbonate of lime, which had crystallized in concretionary lumps, running into each other so as to present a mammillated surface internally, and a smooth shining surface where the concretions had been in contact with the glass. Little spherical concretionary masses of carbonate of lime were also intermixed with the bones and dust in the general heap.

2. A Lachrymatory, or vessel for perfume, composed of dull green glass. This was lying on the top of the mass of bones and fragments of the broken *Ossorium*. It closely resembles one described by Mr. Rokewode, in the *Archæologia*, vol. 26, pl. 33, fig. 5, as a vessel used for *Odores*, excepting that there the neck is longer and more tapering, and the ear narrower. The cavity below the neck (which may either be called a flattened body, or a hollow foot) contains a brown matter, probably the remains of some precious perfume. This vessel had evidently been dropped into the urn after the bones were placed there. That perfumes, scattered over the remains of the deceased, became mingled with the tears of weeping relatives, who were reclining over them, may readily be understood, without our supposing a lachrymal vessel to have been handed about to collect these tears, in order to mix them with the perfume. The inscription quoted by Mr. Rokewode, as recorded from the Tomb of Lælius, at Rhodes, merely states that his mother :

> "Eum lachrymis et opobal
> samo udum,
> Hoc sepulcro condidit."

* [The fragments have been admirably re-united by Mr. Ready, of the British Museum, 1869.]

3. A Coin. This coin is in a state of complete corrosion, and, I believe, is now a compound of black oxide of copper, the grey sulphuret of copper, and the green carbonate of copper, with here and there a few minute atoms of metal. The black parts, which occupy the interior, are readily reducible under the blow-pipe to a globule of copper, and in a glass tube give off much water. It is about an inch in diameter, and appears consequently to have been of second brass, and probably not belonging to the coinage of the Lower Empire. This was found among the burnt bones; but whether it had been subjected to the action of fire or not, it is impossible to determine. Faraday did not consider that a coin of Hadrian, found in one of the urns at Bartlow, had been subjected to heat. This coin, like that, had become firmly cemented to a piece of bone. Had decomposition gone a little further, the whole would probably have fallen to a state of powder; and such may possibly have been the case in some of those instances where no coin has been found in cinerary urns.

4. A small, plain black Jar, three inches high and two inches in diameter, with a wide mouth of one inch and a-half in diameter. This is nearly cylindrical, but tapers a little at top and bottom, like a ninepin.

5. Another Jar of similar material, three inches and a-half high and three inches in diameter, with the mouth two inches in diameter. It is a facsimile of one described by Mr. Rokewode, in the *Archæologia*, vol. 29, pl. 1, fig. 4, and is marked with slightly depressed lines, forming a diamond pattern over the middle portions.

These two jars lay on their sides a little to the S.E. of the *Ossorium*, with their mouths directed towards the N., the smallest being the most northerly. This position seems to indicate their having contained the first offerings (or *munera*) deposited in the *Bustum*, and also that they had been emptied of their contents before they were placed on the floor, which it would have required a person to stoop low and perhaps to kneel down before he could conveniently reach it. These jars are of a gritty material, and have a

coarse appearance; but upon applying diluted muriatic acid to remove a thin coating of carbonate of lime which had partially encrusted them, I have discovered minute, but perfectly distinct, traces of red paint and gilding on their surface, so that they once wore a gayer aspect than at present. May not the slightly depressed lines on one of them have been intended as a guide to the painting it was to receive: and may it not be worth the Antiquary's while to examine similar vessels of this black material, and see whether he cannot discover like traces of paint and gold upon them?

6. A large spherical Pitcher, or Jug, of coarse yellow pottery, ten inches high and eight inches in diameter. It has a short narrow neck, swelling upwards into an opening about two inches and a-half in diameter, and is ornamented on the outside by a depressed line, which coils four times round it in a close spiral. The handle is very short. This nearly resembles one figured by Mr. Rokewode, in the *Archæologia*, vol. 25, pl. 2, fig. 3, only the handle is smaller. This vessel was not standing on its base, but rested in a slightly inclined position on its side, with the mouth towards the N., and the handle upwards. It was full of limpid, tasteless water, which had either dripped or been distilled into it, the narrowness of the neck preventing its becoming again evaporated. This was to the S. of No. 5.

7. Another Jug, very similar to the last, but much smaller, being only six inches high and five inches in diameter. It is more nearly spherical in the body, and the spiral line on the neck has only three coils. This was to the S.W. of the last, and was placed, resting on its mouth, in a completely inverted position.

The materials of which these two jugs are composed contain carbonate of lime, and consequently they could not be cleaned of all incrusted matter so thoroughly as the other vessels, since it was not safe to apply an acid to them.

8. A *Patera* of dark red ware, placed to the W. of the last, and close to the walls in the S. corner. It is seven

inches in diameter, and shaped like the one figured in the *Archæologia*, vol. 25, pl. 2, fig. 5. The Potter's mark is not sufficiently impressed to be distinctly legible. A facsimile is given in the lithographic drawing, and may be BIFVSA or DIGVSA or something else. This was so much coated over with carbonate of lime, when I first examined it, that I read it in an inverted position as VVIII. In this *Patera* were a few fragments of rust, which had fallen from the rod to the iron lamp immediately over it, and which I at first mistook for pieces of carbon; there were also two fragments of burnt bone, which had formed part of a cylindrical body, ornamented by two circles cut round it. Five more fragments of the same bone were picked out from among the bones in the *Ossorium*, and the whole, when put together, have the appearance of having formed part of a knife handle.

9. A *Simpulum* of similar ware with the last, and very like one figured in the *Archæologia*, vol. 28, pl. 1, fig. 5. This is seven inches in diameter and two and a half inches deep. The Potter's mark is very distinct and well written, being ALBVCI, for *Albuci manu*, or *Officina Albuci*. This was resting on its side with the bottom against the S. W. wall, and to the W. of the last.

10. A *Patera* resembling No. 8, only a mere trifle smaller. The Potter's mark is very distinct in this also, but not quite so perfect as in the last. Before it was cleaned I read it as MICCIO. I. but it now appears to me to be MIGGIO. F. *i.e.*, *Miggio fecit.** This vessel has a few dark stains upon it, and it contained four small fragments of *unburnt* bone. These appear to have been chopped pieces, I suspect of the neck of the ox. This was placed to the N. W. of the last.

11. A *Simpulum* resembling No. 9, inclined upon its side, with the bottom against the S. W. wall, and a little to the W. of the last. The Potter's mark reads tolerably plainly as ILLIOMRIA, there being some doubt about the R, whether it be not a P or something else.† I must hope

* [The true reading is MICCIO F.] † [The true reading is ILLIOMRIN.]

that a comparison of the facsimiles in the lithographic drawing, with previously recorded marks of this kind, will clear up any ambiguity about them.

12. An Iron Lamp suspended from the extremity of a twisted iron rod driven horizontally into the S. W. wall, between the two topmost courses, near the S. corner, and stretching towards the middle of the *Bustum*. The lamp is five inches long, shaped like the one figured in the *Archæologia*, vol. 28, pl. 1, fig. 3. To the handle is attached a short rod or long link of two inches, which hangs vertically, the upper end being rudely twisted through a ring at the end of the rod fastened into the wall. This latter is ten inches long, and has a hook near the end in the wall, by which it might have been hung up, if required, in a vertical position. The remains of the wick are distinctly marked by a carbonaceous lump near the lip of the lamp.

13. Two Iron Rods, three and a half inches long, slightly curved, and which had been ornamented by a ringed pattern. They were probably the handles of a small wooden chest which had gone to decay, but some traces of which were to be seen in the form of carbonaceous matter lying in the E. corner. This sort of chest appears very commonly to have formed one article among the furniture of a *Bustum*.

14. Refers to the *unburnt** Bones in the *Patera*, No. 10, and which are probably a portion of one of the sacrifices. These bones are coated on all sides with minute portions of gold, as though gold dust had been scattered upon the offering, or as though a piece of gold leaf had been laid over it after it had been placed in the *Patera*.

The last of the small Barrows was attacked on Sept. 22.

* These bones have been erroneously placed, in the drawing, in front of No. 7, whereas they should have been in the Patera No. 10. There were three or four pieces of *burnt* bones lying in the position at No. 14, but, owing to a misplacement of the memoranda, this error was not discovered in time, and, as I had no opportunity of seeing a proof of the plate before it was struck off, I could not correct it afterwards. There are one or two trifling inadvertencies in the drawing, which must be excused on the same plea; but they are of no real importance. [It has been thought best to reproduce the plate without any attempt at correction.]

This having been much disturbed by the intersecting of a road and the removal of soil from the summit some time previous, it was difficult to determine where the centre lay. A trench was dug directly up to the point which appeared to be about the centre, and there were found two broken vases of imperfectly burnt dark earthenware, each containing a few bones in an advanced state of decay. These seemed to be placed on the natural surface of the soil, which was traced for some distance by a layer of carbonaceous matter, which had apparently resulted from the decay of the turf. A few other fragments of pottery were observed, two pieces of which were of the same red ware as the *Pateræ* and *Simpula* in the last Barrow. Excavations were made in different directions, but no signs of any chamber were discovered.

Many fragments of pottery and tile occur scattered over some fields a few hundred yards to the S. of these Barrows; and upon digging about a spade's depth in one of them, a considerable area appeared to have been floored with brick and mortar. This may possibly indicate the site of some Villa to which these Tumuli served as the last sojourn of its proprietors.

With respect to the date of these Barrows, nothing has yet been found sufficient to determine this question definitely. Still I consider the general character of the articles, and the brick *Bustum*, tally so exactly with those noticed by Mr. Rokewode, from the Barrows at Bartlow, that we cannot be far wrong in admitting them to be of nearly the same age; and this has been conjectured to be about the period of Hadrian. We may therefore presume the Barrows of Rougham to have been prepared between the first and second centuries of our era.

J. S. HENSLOW.

Hitcham, October 2, 1843.

The Roman Tumulus, Eastlow Hill, Rougham. Opened on Thursday, the 4th of July, 1844.

TO THE EDITOR OF THE "BURY POST."

SIR,—On Thursday morning, the 4th of July last, the workmen were sufficiently advanced, after more than four days' constant labour, in exploring the large Tumulus at Rougham, named Eastlow Hill, to raise our expectations that we should be able to expose an extensive deposit of Roman remains by the hour at which the public had been invited to attend. The discovery turned out to be something of a very different description from what I had anticipated. Instead of urns and vases, pateræ and simpula, lamps and lachrymatories, such as were found last year, the only contents of a large chamber of masonry, which I shall presently describe, proved to be a leaden coffin, enclosing a skeleton.

Perhaps it is my scanty experience in this sort of adventure that inclines me to fancy our Antiquaries will feel more interested at this result than if we had met with a repetition of what the Bartlow Hills, the smaller Tumuli at Rougham, and those of other places, have revealed to us concerning the more usual ceremonies adopted by the Romans in burying their dead. I am aware that Roman skeletons have been found before, in leaden coffins; but the circumstance is rare; and I have no opportunity here of consulting the *Archæologia*, or other standard works on Antiquities, to ascertain how far former discoveries may bear comparison with the present.

The object of peculiar interest to myself was the well-built chamber of masonry. My very slight acquaintance with Antiquities must be my excuse, if I wrongly suppose this chamber to afford us, in England, a solitary *existing* example of the manner in which the Romans tiled their houses. I recollect having seen a rather rude sketch (in the second volume of the *Archæologia**) of a tiled roof,

* [Pl. x. See also Akerman's *Arch. Index*, pl. viii. 6. Another similar tomb constructed of tiles was found at York; it contained charcoal and bones, but no urn. Goodwin's *Engl. Arch. Handbook*, p. 49.]

which, I believe, was of the same description as the one we have now found. It was discovered in a Tumulus near York; and if it has been preserved, it may be a second example of this sort. In that case, the chamber contained urns, and other articles of the ordinary funereal deposits. It is not at all likely that any Roman building should be standing above ground in this country, with a tiled roof laid over it 1500 years ago. Another feature in this chamber of peculiar interest to myself, was the arched vaulting, a mode of construction, of which, I believe, there are very few examples among us which can positively be assigned to the Romans—so few, indeed, that, at one time, it was imagined that they were not well acquainted with the principle of the arch.* I am not sure that in this case we can feel quite confident that they had placed absolute faith in that *principle*, for circumstances had required that the woodwork which formed the centering should not be removed.† It had been left, and had rotted, and the fragments had fallen upon the lid of the coffin.

Before I enter into further detail, I shall permit my pen to wander a little into the regions of imagination; and as I have not sufficient leisure at command for writing a *short* letter, you can divide my communication into two parts, if you find I am likely to occupy an undue proportion of your columns in a single Newspaper. I think it is impossible for any one not to lose a little of his propriety on such occasions as these. For 1500 years, or thereabouts, a narrow vault has been tenanted by the mouldering remains of we know not whom—only we feel confident that he

* [This sentence is not altogether easy to understand. There are, it is true, but few examples of Roman arches now existing in this country, of which the gateway at Lincoln is the finest; for others, see Godwin's *Engl. Arch. Handbook*, pp. 34, 37. But semicircular arches were extensively used in Roman architecture, as numerous remains, of bridges and aqueducts more especially, still remain to show. On the Roman manner of vaulting, see Fosbrooke's *Encycl. Ant.*, p. 36.]

† [It has been pointed out to me that Professor Henslow "seems to be unaware that the 'centering' is always left in a brick grave to this day. Its presence by no means implies 'distrust of the principle' of an arch, but is merely an additional precaution against crushing, as the superincumbent weight has to be immediately imposed before the brickwork has had proper time to set."]

must have been a person who, in his brief day, had been eminent in some way or other—for his wealth or his rank, his valour or his position in the social system. No one of little estimation in the eyes of his fellow men would have been buried in the style of this Roman—in a leaden coffin —within a solidly built vault—and with a monumental mound of earth piled over it, which needed the united efforts of a numerous company for its erection. I think we shall not be wandering very far from the truth, in supposing this person to have been Lord of that neighbouring villa, whose foundations we detected last year, in a field at a short distance from these Tumuli. He was possibly the very last who died in occupation of it, before the Roman legions were finally recalled from enervated Britain, in the year of our Lord 426. I argue thus in favour of the late period at which this Tumulus was erected. The Romans in the earlier periods of the Empire burnt their dead, almost universally. The other Tumuli at Rougham afforded examples of this custom, with the usual accompaniments of those vessels in which the offerings to the manes of the deceased had been conveyed to the *bustum*,* and deposited with the burning lamp, to cheer them on their way "to that bourne from whence (as they supposed) no traveller was ever to return," to the enjoyment of light and life, in a resurrection of the flesh. Some of the occupiers of this villa may have returned to Italy and died there—and perhaps a few only of the successive possessors of the property may have left their bones in this foreign land. This may account for their burial ground containing so few barrows, though the villa itself may have stood for many years. We have, however, ascertained that several interments had taken place in the southernmost of the four barrows, which was not well shaped, and might, probably, be the spot appropriated to inferior members in the family. Upon a small cinerary urn, restored from

* This term is to be restricted to spots where *burnt* bodies were deposited, and is not a general word for Tomb, as I see has been supposed by some one who sent an account of this Tumulus to the papers.

fragments found in this barrow, there have been rudely scratched a few letters, from which I can make out nothing satisfactory.* They may be intended for a name; but I sometimes fancy they read ἀεολ . . λα for ἀεὶ ὄλωλα, "I am perished for ever," a sort of lament we can suppose a fond mother might have scrawled, whilst weeping over the urn which contained the bones of her departed child. No one, rejoicing in our happier prospect, can look upon those relics from the smaller barrows, preserved at the Hall at Rougham, without feeling them to be a record testifying to the general belief of mankind in the immortality of the soul. But in the arrangements within this larger and later Tumulus, perhaps we have some trace of the already spreading influence of a still better creed. During the 400 years that the Romans held this country in subjection, the Gospel had been gradually leavening the corrupting mass of heathen superstition. Better conceptions of what is life, and what is death, were becoming interwoven with the current opinions of the world, and they were inspiring even heathens with a contempt for practices which could profit nothing to departed souls. The simpler mode of sepulture adopted for this Roman, may have had some connection with that mighty revolution which was then taking place in the world of mind. The Christians were everywhere abandoning the practice of burning the dead; and, though their faith may not have reached the heart of this Roman, yet his head may have assented to better notions than those which had persuaded his predecessors at Rougham to feed ghosts with oil and wine, milk and blood, and other substantial creations, suited only to the sustenance of a bodily existence. For where are those funeral rites which we found had been so carefully attended to in the other cases? The funeral pyre no longer blazes. The lamp is no longer considered of any importance. No offerings are placed within the vault. All that could be found within the tomb indicative of heathen superstition

* [I regret not to have seen this urn. The Rev. Dr. Bennet has kindly searched for it at the Hall, but in vain.]

was the pass-money (an *obolus*) in the mouth of the entombed. Charon had been propitiated. I have not yet been able to distinguish any legend on this coin, which is nearly as much corroded as the one found last year. There was a little chamber outside the vault, in which glass vessels had been deposited, but unfortunately these had crumbled to powder, and there was no relic of any kind to show what they had contained. If that rusty obolus had been missing, we might have felt half persuaded to believe this Roman had embraced the cross. The superstitions of those days, and of later days, and alas, of these days also, are strange things to look upon. Indeed, we have no need to tax our imaginations for what the false fancies of ignorant and unenlightened minds may formerly have tempted men to put their trust in. I allude to none of the vanities of will-worship; but it seems that even the record in the Acts, concerning those dealers in curious arts who burnt their books and repented, is a lesson lost upon many of us now-a-days; and we still hear of hundreds consulting some "wise man" or "wise woman" (wise indeed in their generation) as confidently as this heathen ever trusted an Aruspex or an Augur. Truly a thousand years in these matters have passed but as one day.

But let me come to a detail of facts; and with the assistance of the woodcuts you have so liberally consented to introduce in illustration of my account, I shall hope to make the structure of the chamber we have discovered intelligible to all. I dare say that very few of the many hundreds who passed through the Tumulus were aware they had been peeping into a building of the form represented in fig. 1. More than half of the roof still remains covered over by the superincumbent earth; but we may see plainly from what has been exposed the real character of the whole.

The workmen approached this subterraneous building by driving a tunnel, at the level of the natural soil, and about six feet high, as directly towards the centre of the barrow as we could judge. At a distance of about fifty feet from the outermost edge of the base, they struck upon the middle

of the Western wall, running in a N.E. direction—rather more westerly than the direction of the tunnel. They had previously come upon the solid concrete foundation (A B C) upon which the tomb is built, and which projects on all sides round the walls. The walls of the tomb were exposed by tunnelling completely round it. The passage round the N. end of the tomb was driven easterly till an opening was effected in that direction through the tunnel, which was the nearest way out again—the tomb lying to the E. of the centre of the barrow. Notwithstanding the very unfavourable state of the weather, many hundreds visited the spot, and the constant stream of wonderers passing through the tunnels was kept up for five or six hours without any intermission. It was very satisfactory to witness the good behaviour and good humour of the labouring classes, who appeared to be far more gratified than I could have expected, considering the absence of all those kinds of sepulchral furniture which were found in the adjoining Tumuli opened last year. The confidence with which Mr. Bennet had trusted them was in no instance abused, and we have this example, among many, that Englishmen are wonderfully improved since the times when they had a character (was it a just one?) of looking more through their fingers than with their eyes. Such a light-fingered faculty is now restricted to the practice of the *clairvoyant* Mesmeriser! There are, indeed, a light-fingered gentry of another class—pilferers of whatever may be transmutable into modern coin, whom we have not thought it advisable to trust over-confidently. Common prudence has dictated the propriety of removing the leaden coffin to a better secured locality; and Mr. Bennet having left it at my disposal, I have suggested its being transferred to the Fitzwilliam Museum, at Cambridge, the nearest public depository suited to its reception with which I am acquainted. It would certainly have been desirable to have left it with the skeleton in the tomb; but probably it would have gradually corroded away in that position. I intend to forward the skull to the Anatomical Museum

at Cambridge, where it will possess a scientific interest, among a rapidly increasing and skilfully arranged collection of objects of comparative anatomy. The rest of the bones will be left in the tomb, to undergo that speedy decay which the admitted influences of the weather will produce upon them. The skull has all its teeth in perfect preservation; but the sutures in it are partially obliterated. Perhaps we guess pretty correctly in believing the disentombed had, in his lifetime, seen about as many revolving suns as the disentomber, born in 1796. In stature, this Roman appears to have been rather more than six feet; but the bones had become so much detached from each other, as to make the measurement a matter of uncertainty. There was a corrupted looking mass of carbonaceous matter, intermixed with hair, about the floor of the coffin and over the bones, which possibly had partly resulted from the decomposition of the hide of some animal in which the body had been wrapped. There were also root-like fibres projecting from the bones, of the legs more especially, which gave them a strange and shaggy appearance. This proves to be a mass of a peculiar kind of fungus, called *Rhizomorpha*, and serves to illustrate the fact, that all fungi are derived from the decomposing materials of some previously organized body, whether animal or vegetable. Here we have the substance of one of the nobles of antiquity converted into materials forming one of the very lowest of the fungi! The leaden chest or coffin was six feet nine inches in length, one foot five inches broad, and one foot four inches deep. It had been formed of a sheet, or sheets of lead, by turning up the sides and ends, after cutting out the piece at the corners, just as we make a pasteboard tray. The edges were soldered on the inside. The lid was a loose sheet, also turned in at the edges and ends in the same way, but without any soldering. The whole was superficially converted to the white oxide (the common white paint of the shops), so that this coffin may be said to have been self-painted. It was also much corroded in parts. A reference to the figures will assist us in better

appreciating the peculiarities of the tomb, and the measurement of its several parts.

Fig. 1 is a perspective view, as it would appear if perfectly cleared of the superincumbent earth.

Fig. 2 is a horizontal or ground plan of the tomb and foundation.

Fig. 3 is a vertical section through the middle and at right angles to the ridge.

The same letters are used to mark the same parts in the different figures.

A B C, A concrete foundation of large flints and very hard mortar mixed with sand; 15 feet square. D E (12 feet); E F (6½ feet); the walls of the tomb, 2 feet thick; 2 feet high at the sides (E N); and the ends 5 feet to the top.

These walls are of flint and mortar, with rows of tile at intervals, as in the city walls of Verulam, Colchester, &c.

It was probably when the walls had been raised to the height of two feet that the coffin was laid in the chamber, and then an arch turned over the cavity GHI. This arch is a half cylinder of Roman tiles intermixed with much mortar. The two end walls were next built up to their full height, which served to close the tomb. The roofing above the arch was filled in with stone, brick, and mortar. A bed of mortar was spread uniformly over the whole, sloping on each side as much as in common roofs. The tiling consists of twelve rows, on each side, with four tiles in a row. Contiguous rows do not overlap at their edges; but the superior tiles in each row overlap those immediately below them. The contrivance by which this effect is secured may be understood by referring to fig. 4, where Q is the upper part, and R the lower, of the same tile. There is a square projecting ledge upon the upper surface of the tile next the edges, but which does not extend quite up to the uppermost end; so that a sort of notch is left there. On the under surface of the tile, and next the edges at the bottomest end, there are square depressions

of sufficient size to admit a portion of the projecting ledge of the tile next below it, so that the under part of one is, as it were, loosely dove-tailed with the upper portion of the next tile. A thick layer of mortar is laid over the junction lines of the contiguous rows, and completely embeds the elevated ledges along the sides of the tiles. Wherever this sort of tiling was exposed above ground, I presume the mortar over the contiguous edges was further protected by other curved tiles, similar to those we place on the ridges of our own roofs. Along the ridge, in this case, was laid a row of hollow flue-bricks, each of them 18 inches long, with a hole on one side. I presume these bricks had been prepared for a Hypocaust, or bath for hot vapour, in the villa; and that they happened to be lying about ready at hand for the workmen who were preparing the tomb. Several of the same description had been worked into the walls of the chamber in one of the Tumuli opened last year.

The N. end of the arched vault has been exposed, by removing a portion of the wall at that end; but the wall at the S. end has been left entire: so that no feature in the Tomb has been destroyed which has not a duplicate left, for purposes of comparison or study. The weight and settlement of the superincumbent earth has cracked all the tiles; but, on putting one of them together, I find it measures 15¼ by 11½ inches, and is 1½ inch thick at the edges, and ¾ inch thick in the middle. The coffin appears to have rested upon woodwork, or perhaps had been completely encased; for we found a great many nails, of various sizes from 2 to 12 inches, lying by its side, and among a mass of decayed wood beneath it.

The addition of the little chamber (M) to the North end of the Tomb appears to have been an after-thought, for it extends beyond the limits of the concrete foundation. When I first saw this chamber, I expected to find in it the sweepings of a funeral pyre, deposited in some coarse jar, as was the case in the largest of the Bartlow Barrows,

where Mr. Rokewode describes such an one to have been placed on the outside of the *Bustum.*

When I was at Cambridge this spring, delivering my annual course of lectures, I took every opportunity I could command of consulting some of the older standard works on Antiquities in the Public Library and Fitzwilliam Museum, expressly for the purpose of preparing myself for the task of opening this Tumulus, and for maturing my judgment with respect to whatever might be found in it. In the course of my researches, I have met with ample evidence that the conjecture was correct which I hazarded in my former account last year, respecting the real use of Lachrymatories. These were not Tear-vessels, as is almost universally believed—they were vessels for balms and balsams. The hypothesis of their being Tear-vessels originated in an unphilosophical view taken of the contents of one of them by an Antiquarian who wrote early in the seventeenth century.* The imaginations of the Antiquarians of that day needed a little ballasting with the facts elicited by more modern science, to check their over-exuberance. The dreams of this propounder of Tear-vessels were readily adopted by a crowd of half-observers, half-compilers; but were amply refuted by some of the more learned and careful antiquarians who succeeded them. It does, then, seem somewhat strange to a mere dabbler in this kind of research, that some modern antiquarians should persist in believing the Ancients practised any such custom as bottling up their tears, in order to lay them by the ashes of departed friends. There is no such word as *Lachrymatorium* in our Latin dictionaries.† Let us in future call these vessels *Vasa Unguentaria.* They may all be classed in the same category as that "Alabaster box of very precious ointment," whose recording in the Gospel is one of

* [The allusion is to J. J. Chifflet, a French physician, whose view became popular. It was defended by Kirchmann, Kipping, and others; but opposed by Schoepflin and Paciaudi, and now generally exploded. See Millin, *Dict. des Beaux Arts*, s.v. *Lacrymatoire.*]

† [The word *Lachrymatorium* occurs in Johannes de Janua and elsewhere, but in the sense of *locus lachrymarum.* See Ducange, *Gloss.* s.v.]

the noblest memorials ever circulated to the honour of the faithful. These *Vasa Unguentaria* were often made of alabaster—I possess a very pretty one, said to have been taken from a tomb in Egypt. They were sometimes hermetically sealed, to prevent the escape of the subtle odour; and thus it became necessary to break off the neck to get at the precious contents. I have made some further memoranda on the subject of Urn Burial, which may possibly be interesting to other persons as ignorant as myself on subjects of antiquity. If I can find time to throw them into a presentable shape, I shall hope to offer them in the form of a Lecture to the inhabitants of a neighbourhood which takes so much interest in this sort of research; but when or where I may be able to do this I cannot at present say.

J. H. HENSLOW.

Hitcham, July 12*th*, 1844.

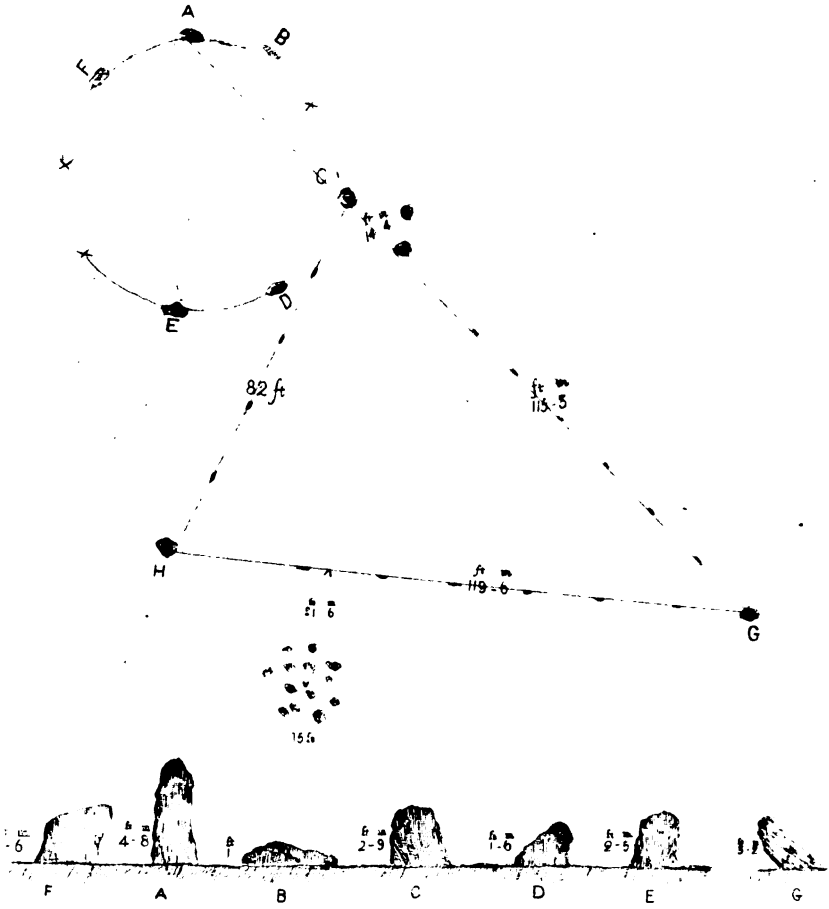


FIG 1.

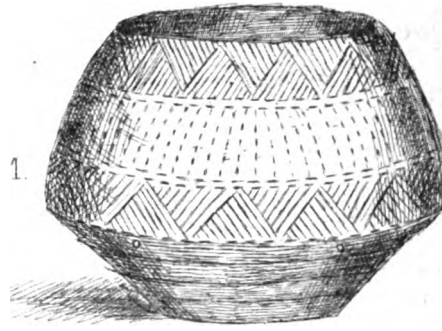


FIG 2.

FIG 5.

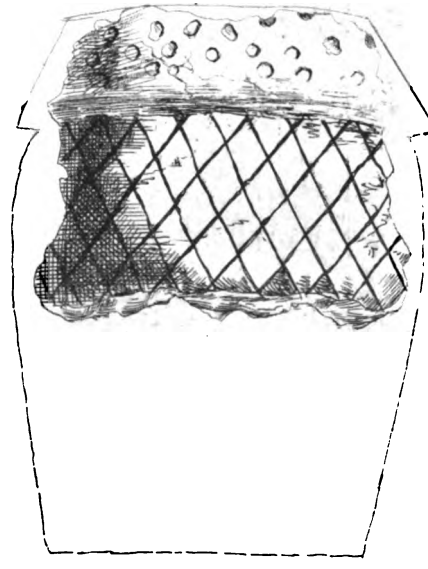
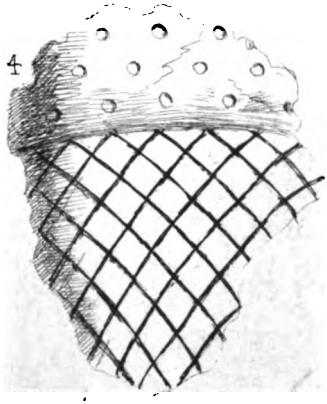
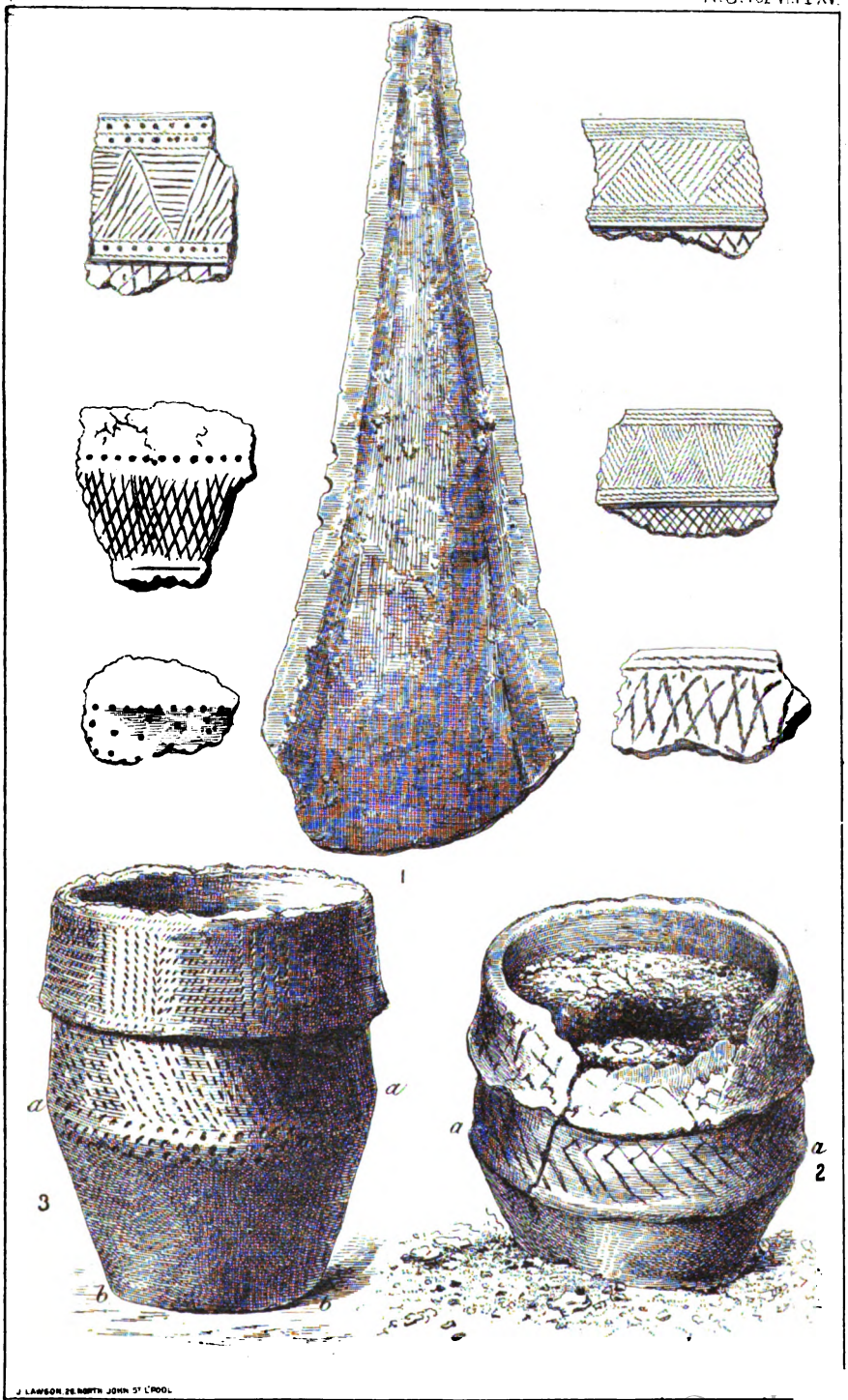


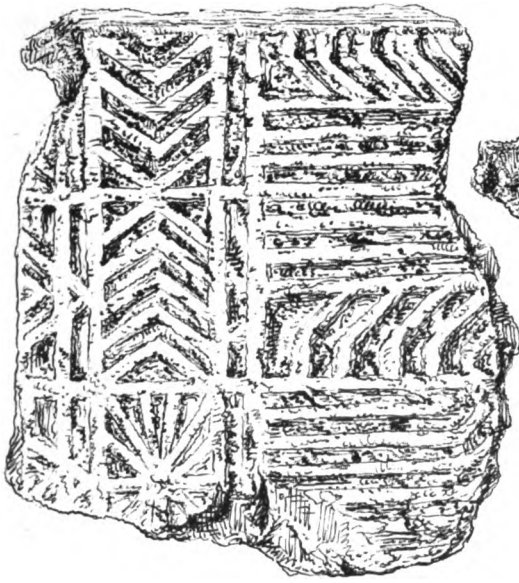
FIG 4





J. LAWSON, 26, NORTH JOHN ST. L'POOL.

BRITISH REMAINS, FOUND AT DARWEN AND EXTWISTLE.



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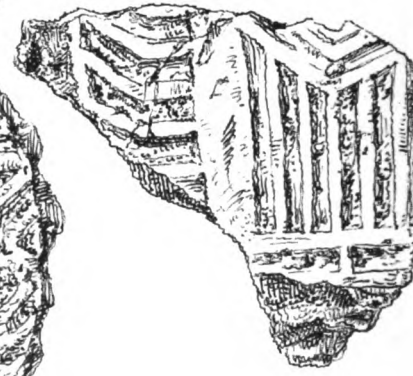

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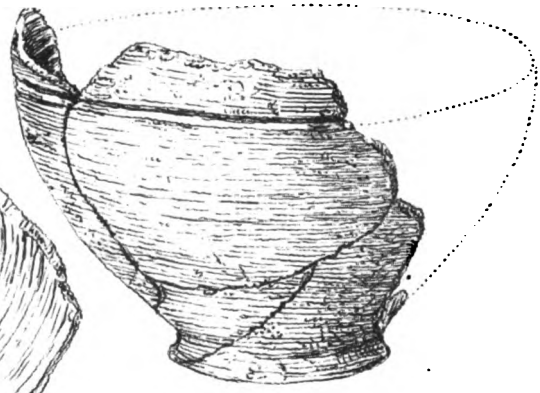

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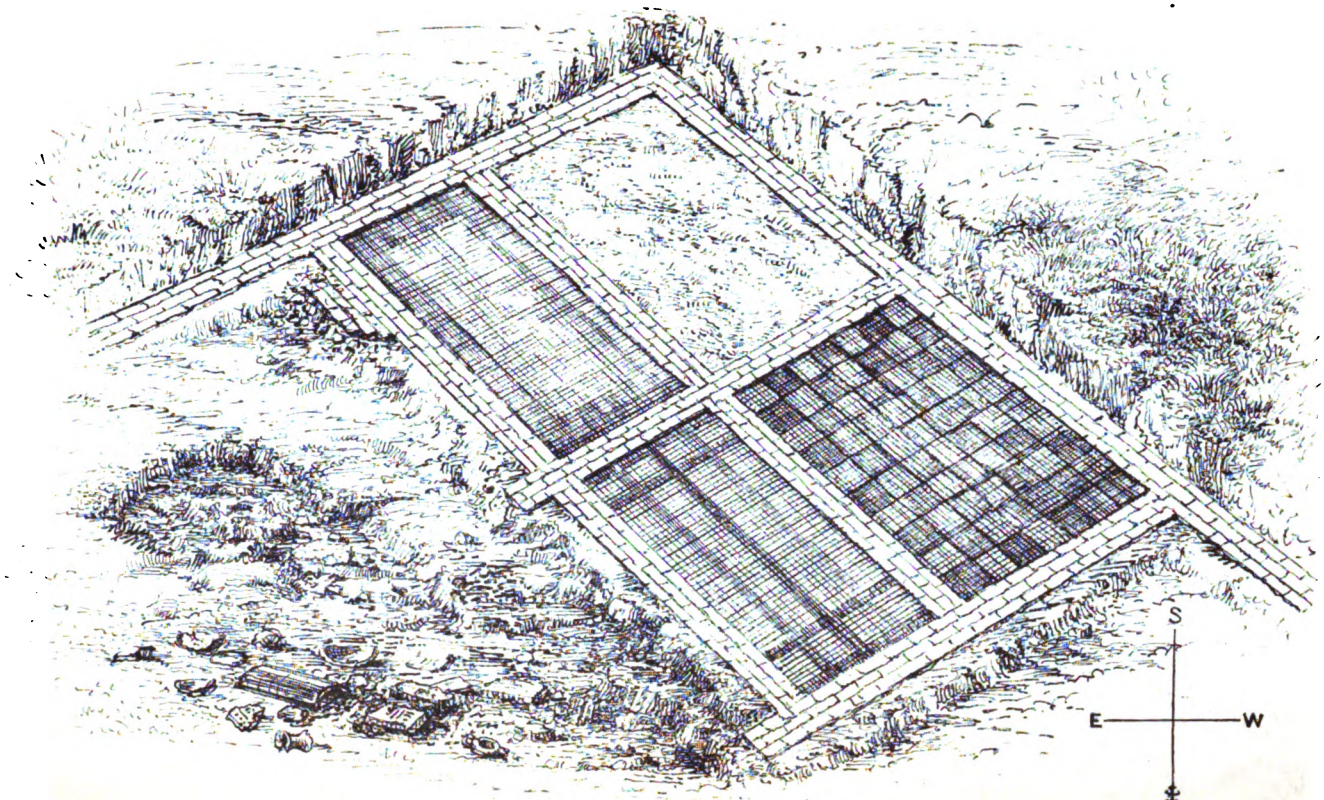


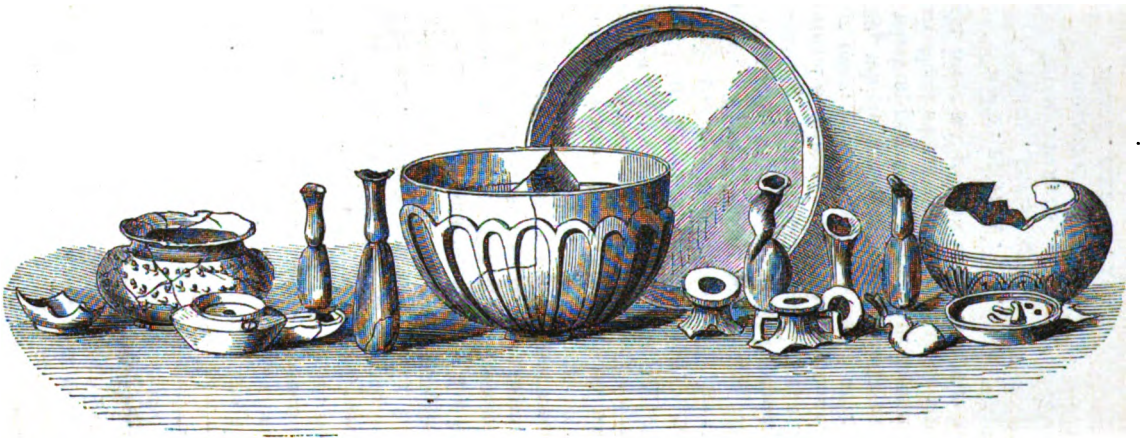
"VIEW OF ROMAN REMAINS AT BECKLEY. OXON."

SEPULCHRAL URNS FROM THE ROMAN CEMETERY OF URICONIUM. (*Scale 2 inches to a foot.*)

a considerable number of urns, many of them perfect, and others so broken only as to be easily put together, to the Wroxeter Museum, in Shrewsbury. A few examples, with some of the jug-shaped vessels also found in the graves, are given in the accompanying cut. The urns, which are of baked earthenware, of different shades of colour, but mostly brown or red, are of coarse substance, but always more or less well-shaped, and vary very much in size. The largest we have yet found is about eighteen inches high. The jug-shaped earthen vessels were perhaps used to contain some liquids which were interred with the remains of the dead; but when found they were filled with earth. Our next cut represents a group of glass vessels and other objects found in the cemetery of Uriconium. We know, from allusions in some of the ancient writers, as well as from inscriptions, that tears, unguents, and aromatics, were sometimes thrown on the funeral pile, and sometimes interred with the dead—contained, as it may be supposed, in small vessels of glass. An inscription in Grüter describes the deceased as being "moistened with tears and balsam"—EVM . LACHRIMIS . ET . OPOBALSAMO . VDVM. The reader will call to mind, also, the lines of Tibullus (Eleg. lib. iii.; El. ii. l. 19), in which he speaks of depositing with the dead the precious products of Arabia and Assyria, as well as the tears of relations and friends:—

"Et primum annoso spargant collecta Lyæo,
Mox etiam niveo fundere lacte parent.
Post hæc carbaseis humorem tollere ventis,
Atque in marmorea ponere sicca domo.
Illic quas mittit dives Panchaia merces,
Eoique Arabes, dives et Assyria.
Et nostri memores lacrimæ fundantur eodem.
Sic ego componi versus in ossa velim."

These precious objects were probably contained in the small narrow glass phials which are so commonly found in the Roman graves, and which, in the belief that they contained only the tears of the mourners, antiquaries have designated by the name of lachrymatories. Some experiments, made by my friend Dr. Henry Johnson, of Shrewsbury, upon the earth contained in these glass vessels, seem to confirm the belief that they were not merely receptacles of tears. He writes to me on the 11th of November: "Respecting the lachrymatories, I have lately seen rather a confirmation of what you said about these having been filled with unguents, incense, or something of that kind, which would by heat yield much carbon or charcoal. I took two of these little glass vessels which had dark matter in them, and which had never been emptied. I put some of the dark matter under the microscope, and I could see pure red grains



ROMAN GLASS VESSELS AND POTTERY FROM THE CEMETERY OF URICONIUM. (*Scale 3 inches to a foot.*)

of the sand of the field,* and intermixed with these many visible particles of pure black carbon, evidently introduced artificially into the sand. On putting some of the soil in a platinum crucible, and heating it red-hot for a few minutes, *all* the charcoal was burned away, and I got a pure red sand like that of the cemetery. The contents of these two vessels were quite black, though I have no doubt they were found deeper than the superficial covering of black mould. One of them had evidently been subjected to fire, so that the supposition that this had been filled with some unctuous oblation, and then acted upon by heat in the funeral pile, is not at all improbable."

These glass vessels help to demonstrate that the same forms were observed by the Romans in their performance of the sepulchral rites in Britain as in Italy. Some of them are found greatly affected by fire, and have been no doubt placed on the funeral pile; others, on the contrary, are perfect, and have evidently never been in the fire, but were no doubt deposited with the urn. Examples of them, in both conditions, are given in our last wood-cut. The one in the middle of the three to the right has been thus affected by the heat in a lesser degree; but the other, lying on the ground beneath it, has been so much melted as to have lost its original shape.

A very usual accompaniment of Roman interments is the lamp, usually made of terra-cotta. There can be no doubt that, under the influence of sentiments with which we are not well acquainted, lamps were among the usual offerings to the dead, and that, when offered, they were filled with oil and lighted. They were found in the tombs at Pompeii, where they were probably placed in the recesses of the walls by the side of the urns of the dead. Their frequent occurrence under such circumstances gave rise to a number of old legends of the finding of lamps still burning in tombs of the ancients, who, it was supposed, had invented a material for the lamp which, once lighted, would burn for ever. One epitaph, found at Salernum, and given in Grüter, which commemorates a lady named Septima, expresses, in what appears to have been intended for elegiac verse, the wish that whoever contributed a burning lamp to her tomb, might have a "golden soil" to cover his ashes.

HAVE . SEPTIMA . SIT . TIBI
TERRA . LEVIS . QVISQ
HVIC . TVMVLO . POSVIT
ARDENTEM . LVCERNAM
ILLIVS . CINERES . AVREA
TERRA . TEGAT

* To explain this, it must be stated that the soil of the field, which is hardly two feet deep, lies upon a deep bed of pure sand, and that the interments had all been made in the sand in which the urns and other objects were found.

1 2 3 4 5

ROMAN CINERARY VASES, FOUND

AT

HORNCASTLE.

ARCHITECTURAL SOCIETY

OF

THE DIOCESE OF LINCOLN.

Horncastle under the Romans. A Paper read at the Horncastle Meeting, June 3rd, 1858. By the Rev. Edward Trollope, F.S.A., Rector of Leasingham.

Horncastle is, almost without doubt, built upon the site of the Roman "Banovallum;" not simply because that station is mentioned by Ravenna in juxtaposition with "Lindum," from which it is not far distant, but because its etymology, viz., "Fort on the Bane," appears to point clearly to Horncastle as the site of the above-named Roman station, it being built upon an angular piece of land close to the Bane, just above its junction with another small stream (the Waring), which only required the erection of a vallum on one side to render it easily tenable, the others being to a certain extent

defended by nature. Possibly the Britons may have had a settlement here, as it presented to them a secure situation near a forest district, and possessing an abundant supply of water—a supposition which the discovery of two British urns in the new Vicarage garden certainly strengthens; and we also presume that they had a settlement in the immediate vicinity, from the discovery of another British urn in Thornton parish, about a mile from Horncastle. This was exposed to view through the excavations necessary for the formation of the Railway in that vicinity, during 1856, and is of rather an unusual form and style of ornamentation. It is nine inches high, and is in the possession of the Rev. A. Newbold, the vicar of Thornton. By the courtesy of the Archæological Institute, its appearance will be readily understood, from the subjoined cut, placed at the Society's disposal with the Institute's usual liberality.

But the Romans, with their usual quick perception, certainly located themselves here at an early period of their occupation of Britain, judging from the date of the coins that have from time to time been found on its site; and they eventually created an extremely strong fort on this spot, enclosing an irregular parallelogram, 600 feet long by 350 feet wide, on its eastern side, and 300 feet on its western limit, with a wall 16 feet thick. Leland refers to this, (*Itin.* vii., 50), saying, "Horncastelle, as far as I can learn, is now most builded within the circuit of an old walled town, or some huge castle, as apperith from divers ruins of a wall." And this wall must have been tolerably perfect in Stukeley's time, who says, "Its

vestigia are manifest the whole compass round, and in some places pretty high and three and four yards thick—it serves for sides of gardens, cellars, out-houses, and as chance offers inclosing the market-place, church, and good part of the town. At the angles have been square towers, as they report: the gates were in the middle of three sides, and I suppose a postern into the meadows (called the Holmes) at the union of the two rivulets." But although portions of this wall still remain above ground, and much more doubtless below, it has considerably wasted away, not by decay, but by the levelling hand of man, within the last century, so that a mere casual observer would probably search in vain for any evidences of its existence. Happily, however, there are portions of all four walls still remaining, so that the exact size of the area they once encompassed can be readily ascertained. Of the south wall about 120 yards may be seen on the south side of the churchyard, and another portion in Mr. Johnson's coal yard. Of the east wall a piece exists in Mr. Heald's yard, and another longer portion in the White Swan yard, extending to the north-east corner of this old stronghold, which appears to have been flanked, not by a square turret, as Stukeley reports, but by a small circular one; although it is now difficult to trace its original form, the whole of the facing having been long since removed, so that a portion of the interior work alone now remains. Of the west wall, a piece (about 100 feet long) stands on the property of J. Banks Stanhope, Esq., M.P., besides another smaller fragment; and of the north wall a considerable portion may be seen on Mr. Holdsworth's grounds. Some of these fragments are as much as 12 feet high; but nowhere can a single original facing stone be seen, nothing but the usual rough work of the interior consolidated by the hardest possible grouting now being visible. About six feet from the ground, however, there are evidences in several instances of an extensive reparation of the walls having taken place, but quite in a different style to the lower masonry, consisting of large blocks of sandstone: this, very possibly, may have been the work of the Saxons after the departure of the Romans.

Outside the southern limits of the town a great number of Roman coins have been found, as well as cinerary urns and fragments of bones,—a fact indicating that the cemetery of that people was there. Stukeley records the discovery of a silver and a brass coin of Vespasian in his time at Horncastle, and that a girl, digging sand by the road side in its vicinity, found an urn full of Roman coins, rings, &c. Since that period other silver coins of Vespasian have been turned up here, as well as specimens of Septimius and of Alexander Severus, Volusianus, a large brass Trajan, a middle ditto of Caligula, several of Claudius, Nero, Hadrian, Domitian, Antoninus Pius, Faustina the elder and younger, Marcus Aurelius, and a complete set of small brasses from Gallienus to Valentinianus Secundus. Here also a few fibulæ and bone pins have been occasionally discovered; whilst the four streets diverging from the Market-place, to a certain extent still indicate the lines of the Roman viæ leading

to the four gates of the town. Stukeley thought that the term of "Julian's Bower" given to a close on the S. W. of Horncastle also pointed to its Roman origin, but this refers only to a mediæval maze formerly existing there. The modern name of Horncastle is no doubt derived from the Saxon "Hyrn-ceaster," the shape of the angular piece of ground or peninsula the town is built upon somewhat resembling that of a horn, whilst its arms traditionally refer to the same derivation, being a Horn and a Castle. Leland, in his *Collectanea*, vol. 2, p. 509, quoting an old and exceedingly mysterious Chronicle, says, "*Vortimer causid the Forteres of Horne Castel to be beten doune, and never sin was refortified: the which Castel was first enstrenghthid by Hors, Hengisthus Brother*, &c." This reputed fact, however, is quite as mythical as the name of the Chronicler from whose writings Leland quotes the above, and is worthy of no credit. Horsa arrived in England, it will be remembered, A.D. 449, with his renowned brother Hengist. Landing at Ebbes-fleet in the Isle of Thanet, they and their followers, probably only about three hundred in number, were retained by certain British princes to aid them against the Scots and Picts, and were stationed in Thanet. Afterwards, being strengthened by fresh recruits from the vicinity of the Elbe, Hengist and Horsa began to entertain ambitious views of conquest, which led to the temporary expulsion of the Saxons from the British soil, Guortimir or Vortimir after three pitched battles, on the Derwent, at Ailesford, and Stonar, having succeeded in driving them into their "Chiules," or vessels, and compelling them to take refuge in the sea. In the second of the above named battles, Horsa fell, A.D. 455, according to the Saxon Chronicle; probably, therefore, his exploits were entirely confined to Kent, or nearly so—certainly he can never have visited Lincolnshire, or strengthened the walls of Horncastle. Of late years considerable Roman remains have been discovered on the south-east outskirts of the town, chiefly in the vicinity of the Union-house, but some on Mr. Clitherow's premises, and others on the Vicarage-ground. They consist for the most part of cinerary vases of grey earthenware, of which a group is given in the frontispiece to this Paper, presented to the Society by the author.

No. 1, is 8½ inches high; No. 2, 10 inches; No. 3, 18 inches; No. 4, 11½ inches; and No. 5, 11 inches in height. Several fragments of mortars of white clay were also found on the Union site, one having a reversed "fecit" stamped upon it, but not the maker's name; also a fragment of a bowl, with a surface pattern of white pipe clay applied to its interior; together with small portions of Samian ware vessels, including one which had been riveted in ancient days, on which a leopard and part of a stag is stamped, and another bearing the terminal portion of the potter's mark, ILIANI; also portions of hand mills, some fibulæ, bone pins, &c.; but the greatest curiosity that was found upon the same site, although certainly not belonging to the same period, is a couple of those marbled clay balls whose date and use still remain uncertain. These specimens are 2⅜ inches in diameter, weigh a little more than half

a pound, and bear no marks of setting. A third was discovered in a tumulus on the Downs near the Brighton race-course, within a rude earthen urn supposed by Dr. Mantell to be British, and containing ashes. A fourth was thrown up from the bottom of a drain on the Rectory grounds at Slymbridge, in Gloucestershire, very similar to the Sussex example both as to size and colouring (see Archæological Journal, vol. 9, p. 336.) A fifth was extracted from a brook at Revesby about twenty years ago, and a sixth was in the antiquities exhibited at Dublin in 1853.

The *date* of the Horncastle walls will be very naturally asked; but as its *masonry*, in common with at least most other Roman remains, is speechless on this point, and no records exist to aid us, we have only the evidence of general history remaining, strengthened by that of the coins found on the spot; but from these we can arrive with tolerable certainty at an approximation of the date required. The first year that the Roman power could have been brought to bear upon the Coritani, or people of Lincolnshire, was A.D. 50, when Ostorius Scapula, having secured the whole of the southern portion of Britain, which he fortified by a line of strongholds reaching from the Avon to the Severn, converted it into a Roman province. Shortly after this, if not before, the Coritani doubtless submitted to the Romans without a contest, for we find that a far more powerful and remote people were forced to do so at this period, viz., the Brigantes, or people of Yorkshire, Lancashire, Westmoreland, Cumberland, and Northumberland; but it was probably twenty years after the submission of our Lincolnshire forefathers that the Romans began to assume the actual possession of their soil, under the command of Julius Agricola. That great and wise Roman, in command of the 20th Legion, had been sent to Britain with the Proprætor Petilius Cerealis, during the first year of Vespasian, and completely subdued the Brigantes, who had revolted. Again, he was sent A.D. 78, as Proprætor, or Governor of Britain, the year before Vespasian died; and in the following year, by a most judicious mixture of severity and lenity, he completely established the Roman power everywhere in this island, and afterwards in a considerable portion of Scotland. During his rule, then, I have little doubt but that the walls of Horncastle were raised—an opinion which is certainly strengthened by the list of Roman coins found in the immediate vicinity, the first of these belonging to the Emperor Vespasian.

Horncastle appears to have been remarkably well off for roads at the time of its occupation by the Romans. One led to the west, above Thimbleby and Edlington, by Baumber, Langton, Wragby, and Sudbrooke-Holme to Lincoln; another to the north, branching off from the one named, near Stourton (or Street town) Hall, by Ranby, Market Stainton,[1] South Willingham, Ludford, Bully

(1) Market Stainton possessed a large tumulus until the year 1833, when it was levelled by the proprietor of the site. It was situated close to the junction of the Horncastle and Caistor road with that leading to Goulceby. It was 96 feet in diameter, and 21 in height. On its removal, a skeleton of large dimensions was found towards its western face, about

Hill,[2] Thoresway Warren, to Caistor; and thence to Barrow and Barton on Humber. Two roads lead to the coast on the east, viz., the great Foss-way, proceeding from Ludford, Tows, Ludborough, to Grainthorpe-haven; and another by Ashby Puerorum, Ulceby, Orby and Burgh, terminating at Wainfleet. There were also, perhaps, two to the south; the one communicating with Bolingbroke and Boston, the other with Tattershall, Sleaford, Threckingham, Bourn, and the great station of "Durobrivæ," whose site is now partly occupied by the village of Caistor—a corruption no doubt, like its more important namesake in the north, of "Castrum." Time would fail to mention even the principal of the Roman remains that have at various times been discovered on the borders of these several roads. I will therefore here conclude this short sketch of the Roman "Banovallum" and its antiquities.

midway between its base and summit, accompanied by a large pair of stag's horns, and covered with a heap of stones and flints gathered from the adjoining land. This tumulus was doubtless of British origin.

(2) Bully Hill was completely investigated last year by the Rt. Hon. C. T. D'Eyncourt and several other Members of the Society. From its elevated and conspicuous position, a considerable degree of interest had always been felt respecting its date and origin. It was found to be 12 feet high and 78 in circumference. A thin layer or flooring of pounded chalk had first been laid upon the natural surface of the eminence where it is situated. Above this, portions of sun-dried British pottery were disclosed, accompanied by a great quantity of wood ashes, some flint arrow-heads, and small flint flakes, or knives, with which the Britons, in common with most other barbarous nations, cut themselves when in deep sorrow. Above this deposit a mound of chalk had been heaped, and then a deep layer of stiff loamy soil, the whole being finished off with a coating of the ordinary surrounding surface soil. At about six feet below the summit of the mound four human skulls, deposited upon a layer of bones placed in a regular manner, were found; and, close by, a nearly perfect skeleton and the remains of a middle size rodent animal, thought to be those of a red-deer, together with some fragments of undoubtedly Roman pottery; whence it may be fairly assumed that this tumulus was first raised by British labour, and afterwards used as a funeral depository by the Romans. The term "Bully Hill" given to this and other prominent mounds, like those at Tathwell, is probably derived from a Norse word meaning a swelling, or partly spherical object—still retained by the French "Boulet," or ball, and the English "bullet."

DUROBRIVÆ.

By the Ven. EDWARD TROLLOPE, M.A., F.S.A., Archdeacon of Stow.

THE village of Castor, situated four and a half miles west of Peterborough, marks the site of a spot occupied in turn by a British tribe, a Roman population, and a Saxon sept. By the first it was called Caer Doun; by the second, Durobrivæ; and by the third, at first Dormceaster or Dormundeceaster, and subsequently Kinniburgceaster, after Kinneburga or Kyniburga, daughter of Penda, King of Mercia, sister of Wulfhere and Kyneswith, and wife of Alfred, King of Northumbria, who founded a monastery here A.D. 669, where she was buried; but all these long names have now been superseded by the abbreviated name the place now bears, viz., Castor. In the valley of the Nen below runs the Roman Ermine Street, formerly called Kinniburga's way, from a strange confusion of her connection with this place and the wonderful old road passing by it, the origin of which is poetically assigned to a miracle wrought in her behalf, viz., that when pursued by a ruffianly assailant this road unrolled itself before her as she fled through the fields, and thus enabled her to escape. Subsequently her body was translated to the Abbey of Burgh (Peterborough) by Abbot Ælfsi, and in the year 1010 her monastery was fired by the Danes under Svein, when he made a disastrous raid in the fen district of this part of England. It is, however, only the remains of the Roman town, partly occupied by the modern village of Castor, which I now desire to describe. There were two important Roman towns called Durobrivæ,—one now represented by Rochester, and this Northamptonshire Durobrivæ on the Nen, built partly in the valley and partly on the higher ground eastward of it. Probably to avoid the fenny district, which the Ermine Street must have traversed, had its line continued to run in a due northern direction, it was turned westward half a mile north of Norman Cross and

opposite to Yaxley so as to point directly to Stamford, and thus passed through the Roman military station and town about to be described. This was situated between Chesterton and Aldwalton on the south, and Water Newton and Castor on the north, beyond which were detached Roman houses in the parishes of Sutton, Sibson, Stibbington, and Wansford, the remains of which have at intervals been disclosed.

An entrenched camp, afterwards used as a regular military station, constituted the nucleus of this important place under the Romans; and this still remains in a very fair state of preservation pretty nearly equi-distant from the four above-named villages. In form it is an irregular hexagon 2,200 feet long, and 1,300 feet wide, diminishing to 600 feet at its southern end, and is surrounded by a foss and vallum. This stands between the Great North Road and a bend of the Nen, and is now commonly called the Castles. On the north runs a little tributary streamlet of the Nen. The Ermine Street ran through the midst of it, entering its inclosure about the middle of its southern boundary, traversing it obliquely and passing out at its north-western angle. Morton, in his history of Northamptonshire, says, there was a tradition of the former existence of the remains of a bridge between Chesterton and Castor, serving to join the two parts of the ancient city, but of this there are now no remains. Within the camp is a tumulus—probably marking the spot where the remains of some Roman officer of distinction were buried, and on the greater part of its area portions of Roman buildings, and much pottery, have been discovered. Both a camp and a settlement existed here before the construction of this great work, for both of these seem to have been subsequently intersected by it, and beneath it the foundations of Roman buildings, and several potters' kilns, were found in Normanton field, a little to the south of the camp. Hence this last was possibly made by Aulus Plautius, as suggested in "Gough's Camden" (Vol. ii. p. 286). Whether a wall in part defended it on the north side, as some have thought, cannot now be determined. From it Morton asserted that a paved road ran up to another Roman stronghold, now partly occupied by Castor Church and churchyard ("History of Northamptonshire," p. 511), but he was misled by the discovery of a tessellated pavement belonging to a house, and not to a road.

Stukeley was convinced of the former existence of such a stronghold, and that it was surrounded by a wall, the foundation of which he states he saw in the street, north-west of the church, where the incumbent then lived. "It is easily known," he says, "by the vast strength of the mortar, [the wall being] built of the white slab-stone of the country. Underneath it lay the city, for below the churchyard the ground is full of foundations and mosaics. I saw a bit of a pavement in the cellar of the ale-house (The Boot). They know of many such, particularly at Mr. Wright's, and in the landlord's garden is an entire one untouched; the square well by the porch no doubt is Roman" ("Itinerarium Curiosum," pp. 78, 79). Here also were found some foundations of hewn stone, together with some thick pointed iron-bars 10 feet long ("Gough's Camden," vol. ii., p. 257). This spot Artis[1] suggests was occupied as the Prætorium, and that it extended in an oblong form from a point north of the church to another lying beyond the road southward of it, and thus enclosing a space 350 yards long, and 200 yards wide; but certainly within this area several Roman buildings of some importance were grouped together, which have more the appearance of separate villas or private houses, than those we should expect to find within the limits of a Prætorium. One of the most interesting of these (termed "The Baths" by Artis) was discovered by him in 1821 on the north side of the road leading from Peterborough to Wansford. Its walls, like those of all the other Roman buildings here, were thick, and built with courses of stones laid edgeways and slantingly, one course sloping in an opposite direction to the one above it, so as to produce what is popularly called herringbone-work. This building had at least eight rooms on the ground floor, of which the four central ones were heated at pleasure by hypocaustal chambers beneath. These, together with the furnace heating them, were quite perfect. Beneath a room at the north end was the receptacle for ashes from the furnace, and at the other end was a large room without a hypocaust. Adjoining this was a small but long room with a semi-circular bay or recess in the middle, and next to it three very small rooms of precisely the same size, which perhaps served as dressing or sleeping rooms. The existence of so large a hypocaustal arrangement in this building does not justify its

[1] "The Durobrivæ of Antoninus illustrated."

title to be called "The Baths," although, no doubt, it contained a bath for the use of its original inmates, such being the ordinary mode adopted to heat houses by the Romans, quite irrespective of baths.

Between this building and the church, but a little more towards the east, the substructures of two other buildings were found during the same year. In one of these, containing three or four rooms, was a beautiful pavement composed of red, white, grey, and yellow tesseræ worked into a beautiful design. The centre had been injured by the accidental sinking of a well through it, but enough remained to show that it consisted of a device like a flower having eight heart-shaped petals surrounded by an inverted edge within a circle. Beyond this was a wide border comprised of four oblongs, each containing an elongated lozenge having a guilloche border, and four small squares at the corners, each also containing a similar lozenge placed diagonally within it, and other enrichments. This pavement was unfortunately taken up and made to serve in an ante-room to a dairy at Milton, the seat of Earl Fitzwilliam, in whose service Mr. Artis was.

A little to the north-east of Castor Church, and partly beneath the road bounding the churchyard, the remains of a building containing five rooms were found by Artis, having walls similar in construction to the one last described, and on the north of the north transept, within the churchyard, part of a tessellated pavement was found in 1827. This consisted of two oblongs placed side by side vertically, and another at one end, placed horizontally, composed of grey, white, and yellow borders. Beyond this, and on the north-east of the church, principally beneath the road abutting upon the churchyard, the foundations of a group of Roman buildings were uncovered. Among these were those of a house, one of the rooms of which was built over a hypocaust on an inclining level, having blocks of masonry to serve as *pilæ* to the room above, and another was over the furnace. Adjoining this were the remains of three more rooms, belonging either to this or an adjoining house, each of which had a tessellated pavement. One of these, paved with large stone tesseræ, had an oblong compartment, in the centre, of finer work, formed of interlacing bands composed of grey, red, yellow, and white tesseræ, enclosing a smaller oblong formed

of grey and white bands. The character of a doorway to a hypocaust in this group of buildings is given by one of Artis's illustrations (plate 26, fig. 3), whence we find its jambs were built of square blocks having very thick beds of mortar between them, and that the semicircular head was built of their stones radiating outwards, having a still thicker bedding of mortar between them. South of these buildings, and nearly due east of the church, were portions of an edifice—thought to have been a temple by Artis. Three steps extending along its whole end, 37 ft. wide, led up to an outer platform 10 ft. wide, beyond which, but at a slightly lower level, was another platform within the building, raised 2½ ft. above the level of the area beyond, which was 30 ft. square, having what appeared to be the base of a square altar or statue pedestal in the middle.

On Mill-hill, south of Castor, and more immediately overlooking the Camp below, four large Roman houses were excavated by Artis in 1822. The south-easternmost of these had a frontage 150 ft. long. Two of its rooms had tessellated pavements. In the centre of the larger one (Artis, plate 19) was a vase within an octagon, having a guilloche border enclosed within a square filled with an ornamental design. Round this was a deep border of small red, grey, and white squares, diversified with a little interpolated square in the centre of each side, two of which contain an interlaced device on a grey ground, and the other two a waved circular one within a border. Beyond this was an outer border, composed of larger grey and yellow squares bordered with red. The other pavement was far more simple, its pattern consisting of circles and semicircles worked in red tesseræ upon a stone-coloured ground.

Next to this was a much smaller but more interesting house. This was 67 ft. long and 25 ft. wide, having a semicircular projection in the centre of its front. It contained seven rooms; the largest of these, having the above-named projection, and another, had hypocausts below them; a third very small room was heated by wall flues, and another was supplied with an ascending flue. In the hypocaust of the largest room a human skull and some bones were found. The central room at the back had a tessellated pavement, consisting simply of a plain chequered pattern.

Only small portions of the walls and hypocausts of the next house remained perfect. The fourth was the largest of all, being 172 ft. long and 47 ft. wide; this contained at least seven rooms, two of which had chequered tessellated pavements. The furnace and system of flues heating one of its rooms remained very perfect. In the middle was a small square chamber, intersected by four flues passing into it diagonally and at right angles, one of which communicated with the furnace, and thus supplied heat to all.

At Water Newton portions of two Roman houses were found, the plans of which are given by Artis (Plate xxxiv.). One of these stood a little to the north-east of the village, and near the Nen. This contained ten rooms at least, some of which had tessellated pavements. The second was situated south of this and of the Great North road, and had as many rooms as the other, including a corridor, if we may so term it, 14 ft. wide, and at least 120 ft. long. North of these houses, and on the opposite side of the Nen, part of another large house was found in Sutton Field, consisting of thirteen rooms, one of which constituted a corridor 12 ft. wide and 60 ft. long, and another had one of those internal semicircular foundations so common in Roman houses, and intended to support either an apsidal terminal wall or colonnade. Some of the rooms had hypocaustal chambers beneath them, supported by brick *pilæ*, and tessellated pavements. Running from a room at the eastern angle of this house was a curious drain, of serpentine form, diminishing in diameter as it proceeded. This was evidently a waste-pipe, the contents of which were thus conveyed to a gravel bed, serving as a natural means of drainage. Just beyond the east wall of this building was a well not far from the above-named drain (Artis's Plates, xxxiv., xxxv.).

The way in which the walls of Roman houses were adorned is well exemplified by part of a building found within the camp at Chesterton, and another in Normangate field. Those of the first were composed of a concrete formed of fragments of Alwalton marble, gravel, pounded bricks and lime, but one of the rooms was lined with slabs of Alwalton marble, and another with white stone tesseræ laid in a layer of cement, made of lime, fine pounded bricks, and river sand. The walls of the other house exhibited traces of the manner in which its bath chamber was

decorated. Below was a bowl-shaped bath, supplied with hot water from a still remaining cauldron, placed over a furnace outside the bath-room, and the plastered wall above was gaily painted to imitate white pilasters with brown bases and capitals, between which were bright crimson panels with green borders, a grey, brown, and yellow plinth, and a white, yellow, and dark crimson cornice, along which was suspended a folded linen band slightly drooping in a fillet fashion from the tops of the pilaster capitals.

But few sculptures or inscribed stones have been disclosed by the excavations at Durobrivæ; one mutilated bas-relief, however, was turned up in clearing out a dyke on the west of the camp at Chesterton. This represented a nude male figure, whose head and hands were lost, but it was apparently that of Hercules. Near to it a small slab also was found in removing part of an old wall on the north side of the camp, inscribed with the word MARTO. In Normangate field a circular milliary stone was discovered, bearing the following dedicatory inscription to Hadrian: IMP . CAS . MANNIO . ADRIANO . PF . INVICTO . AVG . MP. A small altar-shaped stone, 9½ in. square, rudely panelled at the sides, and terminated above in a truncated pyramidal top, but without an inscription, was also found; also the base of a small stone pillar nearly 9 in. in diameter. Of terra-cotta, or earthenware, numbers of articles were turned up, such as square and oblong flue-tiles scored with various devices on their surfaces, flat floor-tiles, flanged roof-tiles, small arched ones to cover their upturned edges, pipe-tiles, the square tiles or thin flat wide bricks serving to cover hypocausts or to build their supporting *pilæ*, and moulded arch bricks used in the construction of potters' kilns; here also mill-stones of hard clay, stone, and brecia or pudding-stone have been discovered. Nowhere in England have Roman potters' kilns been found in such great number or in so perfect a state as on the site of Durobrivæ and its vicinity. One of these, discovered in the year 1822 in Normangate field, was of a spherical form 33 in. in diameter, and composed of terra-cotta tiles surrounded by curved moulded bricks; beneath was a furnace, access to which was provided by means of an arched aperture in a wall forming the front of the kiln. Within this kiln were found various vessels left there by the Roman potter who made them.

These are given in Artis's Plates LIII., LIV. One of these was a vase of grey ware, having a small foot, a swelling pear-shaped body, and a high plain vertical rim. Besides two borders of indented work, this vase was ornamented with one of a waved character, four decorative circlets, and as many suggestive plants having scroll-like leaves and circular flowers or fruit in raised white clay. Another was a similar vase of dull red ware, with indented sides, wide mouth, low neck, and semicircular markings worked upon its shoulders and between its indentations. There also portions of two Samian ware bowls were found, one ornamented with dancing figures placed between medallions containing smaller figures, and borders, worked in relief; the other of provincial grey ware, ornamented with indented circles, lozenges, and other figures. Another kiln, circular in plan and gradually increasing in diameter as it rose, was entirely built of moulded curved bricks. The floor was supported by a central shaft, expanding at the top the better to fulfil its purport, and composed of triangular tiles, the points of which met in the middle, and were pierced with holes to allow of the emission of heat from the furnace below. The mouth of this furnace resembled that of the other, but was lined with tiles, the edges of which showed themselves in the stone facing of the kiln.

Many such kilns were found by Artis extending from Castor up the valley of the Nen to Wansford. These he deemed to be of different dates, the older ones being formed of bricks rudely moulded by hand, and often found in a ruined state, with their floors broken and their interiors filled with broken pottery and other débris. Of these one was unique, over the furnace of which two circular earthen vessels, capable of containing eight gallons each, were suspended by their rims. They were thought by Artis to have been used for glazing purposes, and when found contained some whole and many broken vessels. As a rule, the Durobrivæan potters' kilns were thus constructed. First a circular hole was made, about 4 ft. in diameter and 2 ft. deep. This was lined with brickwork composed of curved moulded bricks, and in the centre was an oval pillar supporting the kiln floor composed of triangular pierced bricks. This lower chamber was heated by an arched furnace lined with brick-

work about one-third of the diameter of the kiln. After a set of vessels intended for firing had been packed close together on the kiln floor, coarse grass was strewn upon them, then a layer of clay, and then grass again, upon which another set of vessels was ranged; then the process was repeated, the upper layers being reduced in width to suit the dome-shaped top of the kiln, in which only a small hole was left. Earth was then heaped up round the kiln, the furnace was filled with wood and fired, and when the heat had been kept up for the requisite time, through the above-named precautionary measures, each vessel could be removed without fear of breakage from cohesion.

The produce of these kilns is superior to those of Upchurch both as to shape and design, and rivals the wares of any other part of Britain under the Romans. We await with interest the description of those brought to the notice of the Southampton Meeting by Mr. Bartlett, as having been made in the New Forest.[2] In these kilns, glazed and unglazed specimens of red, brown, grey, black, white, and cream-coloured wares were made, the grey being produced, as Artis thinks, by subjecting them to a suffocating process, and thus impregnating their surfaces with smoke when under the action of a certain amount of heat; and in confirmation of this opinion he mentions that he found the whole interiors of some kilns charged with the same hue, which appear to have been used as smother-kilns, and that the result of certain experiments he tried led to the same conclusion; he also states, that the clay of which the kiln bricks were made was mixed with about one third of rye in the chaff, which being consumed by the fire, left cavities in the room of the grains, which he concluded was intended to modify expansion and contraction, and to assist the gradual distribution of the colouring matter. He thus describes the process of making and ornamenting the pottery baked in these kilns. "The vessel, after being thrown upon the wheel, would be allowed to become somewhat firm, but only sufficiently so for the purpose of the lathe. In the indented ware the indenting would have to be performed with the vessel in as pliable a state as it could be taken from the lathe. A thick slip of the same body would then be procured, and the ornamenter would

[2] Arch. Journ., vol. xxix. p. 406.

proceed by dipping the thumb, or a round mounted instrument, into the slip. The vessels, on which are displayed a variety of hunting subjects, representations of fishes, scrolls, and human figures, were all glazed after the figures were laid on; where, however, the decorations are white, the vessels were glazed before the ornaments were added. Ornamenting with figures of animals was effected by means of sharp and blunt skewer instruments, and a slip of suitable consistency. These instruments seem to have been of two kinds: one thick enough to carry sufficient slip for the nose, neck, body, and front thigh; the other of a more delicate kind, for a thinner slip for the tongue, lower jaws, eye, fore and hind legs, and tail. There seems to have been no retouching after the slip trailed from the instrument."

Roman potters, of the Continent, as well as of Britain, were accustomed to stamp some of their wares with their names in full or abbreviated, accompanied by the letter F, for fecit, O, or OF, for officina, or M, for manu. Samian ware was usually thus stamped across or within small circles in the middle of the inside of shallow vessels, but on the outside of bowls. Mortars and amphoræ of white and cream-coloured ware were ordinarily stamped on their rims or handles. Many vessels thus stamped have been found on the site of Durobrivæ. Of Samian ware several fine bowls were dug up in Normangate field, all of which had the usual upper border, consisting of double depending loops and pendants between. One of these was also ornamented with boldly undulating stalkage and foliage, within the alternate folds of which were an animal, a little altar with a bird on either side, with a pediment above. Another, with an upright side, was ornamented with a deep band divided into compartments filled with figures of Genii supporting arches over Tritons, alternated with depending semicircles containing stags at full speed, and other animals, such as leopards, on a larger scale below (Plate L.). On the fragment of a third, a man attacking a boar with a spear, trees, and hares were represented; and on a fourth, a satyr's head, with a small altar or pedestal before it, within a circlet, a man in a tunic, a hare, and birds (Plate LII.). Other similar fragments, which had received injury when still in the hands of their first possessors, exhibited the care with which fractures had been made good by means of metal rivets. Most of these

displayed either hunting scenes, or representations of animals, such as the leopard, lion, stag, boar, and dog; one small fragment had a very spirited representation of a man with upraised arm holding a sword, and riding upon a leopard, and the pattern of another consisted of foliage. circlets containing birds, and beneath these sea-horses (Plate XLVIII.). Two vases of what may be called Durobrivæan ware have already been described in connection with the kiln in which they were found. Two others of a similar kind are figured in Artis's Plate LI. One is of grey ware, ornamented with two crimped bands having a bold scroll pattern between them, suggestive of curving stalks and flowers or berries, applied to the surface in white slip; the other of black ware ornamented simply with incised lines, but remarkable for the elegance of its shape.

Vessels which may be termed either bottles or jars, of white, cream colour, red, brown, grey, and black, plain and variously scored, with and without handles, have been found in great numbers at Durobrivæ. One of white ware was rudely shaped like a human head and neck, and similar to one found at Lincoln, bearing a dedicatory inscription to Mercury (Plate XLIX.). Another form of vase given on the same plate was common; this may be termed a flat bowl sharply expanding from a small foot with a flat vertical rim, and a nearly flat cover overlapping it and fitted with a central circular knob, the whole exterior being elaborately scored with what Artis terms engine-turned work. Drinking cups and a few lamps, human heads, and other articles worked in various coloured wares have also been found here; but perhaps the embossed ware, not only from its character, but from the subjects represented upon it, are more interesting than any other, as pourtraying British sporting scenes rendered by Roman colonial artists. On one fragment of this ware, found in a potter's kiln, two fleet greyhounds are represented with collars round their necks, in full chase after a hare (Plate VII.). On another, first, a similar hound is represented in pursuit of a stag, and then two hounds in the act of capturing it, supplemented by scrolls above and below—perhaps intended to stand for bushes or herbage (Plate XXVIII.). Other fragments are decorated with figures of various creatures, such as the dolphin and lamprey, fancifully rendered (Plate XXX.), and

one has a portion of a figure upon it, perhaps a gladiator, from his attitude and from his being stripped to the waist. Other specimens are decorated with various beautiful scroll patterns. Great quantities of iron articles have been discovered on and around the site of Durobrivæ, such as hatchets, spear and arrow heads, knives, and other implements, bolts, hinges, buckles, rings, &c., all of Roman manufacture, but made of British iron found in this part of Northamptonshire, one kind of ore being of a dark chocolate colour, the other from its appearance being called grey honeycomb. The manner in which the metal was extracted from the ore by the Romans is clearly shown in Artis's plate XXV., derived from the discovery of an iron furnace found at Wansford, near Durobrivæ. The ore was first roasted on a brick floor, perhaps by being packed between layers of charcoal and covered up with earth. Then it was placed in a large earthen vessel, shaped like a modern flower-pot, over a furnace having an arched mouth, the whole being enclosed with masonry. The furnace was heated with charcoal, and when by some artificial aid—the knowledge of which has been lost—the metal was melted, it was conducted by means of a little channel to a group of pig-moulds, while the refuse, or slag, spread itself over the ground in front of the furnace.

Of brass, the following articles have been found, viz., a bracelet, turned up by the plough at Chesterton, and circular fibulæ, rings, bone pins, strap-tags, tweezers, small scoops, vase-handles, ornamental studs, keys, a curious long implement of brass, said (by Artis) to have been gilt, having a flat spear-shaped head, found at Water Newton, and many other articles; but perhaps the most curious object connected with Roman metallurgy found here was a set of moulds for casting sixty-two small brass coins at once. When required for use these were packed one over the other in two piles, and between each was a little channel communicating with a small central shaft, reaching from top to bottom of the piles. These were then enveloped in a clay wrapper having a funnel-shaped mouth above, communicating with the central shaft. Into this mouth the liquid metal was poured, which ran from the shaft into the coin-moulds on either side; and as each of these was so impressed as to give the desired obverse of the coin on one side, and the

reverse on the other; when put together each coin was thus cast perfectly on both sides at once; and curiously enough in one of the moulds a coin of Severus was left. With these moulds, a crucible of red ware was found of a funnel shape, and another of white ware, shaped like a pitcher. Many coins have of course been found on the site of this once important town, and around it. An old author states that in Normanton fields such quantities of Roman coin used to be thrown up "that a man would really think they had been sown." Specimens of the following Emperors have at different times been discovered here, viz., Galba, Vespasian, Domitian, Nerva, Trajan, Hadrian, Antoninus Pius, Faustina, Lucius Verus, Severus, Gordianus, Titricus, Quinctillus, Carausius, Constantius Chlorus, Constantinus Magnus, Crispus, Constantinus Secundus, Constans, Constantius Secundus, Magnentius, Valentinianus, Valens, and Theodosius.

In addition to the above-named articles, the following small miscellaneous objects have been discovered at Castor, viz., a gold ring found at Chesterton, having a male head cut in intaglio upon it, the mouth-piece of a musical instrument, a knife handle, and pins of bone, also jet pins, and glass beads of the usual Roman types.

Besides these vestiges of the Roman occupation of Durobrivæ, every mode in which that great people disposed of the dead was exemplified in that place. Without the south-eastern portion of the camp in Normanton field was a cemetery, in which many skeletons were found, all laid in regular order, but unaccompanied by any traces of coffins; and just beyond its north-western limit a number of skeletons in stone coffins were found. By the side of the high road near Chesterton, a coffin of hard yellow stone 6 ft. 2 in. long was discovered in 1754. This had a flat lid overlapping the edge of the coffin about 2 in., like the lid of a wooden box. It contained a skeleton, one of the leg bones of which had been fractured and set during life, also three glass vessels, portions of brass and jet pins, coins of Faustina and Gordianus, and small fragments of wood. At Water Newton a large leaden coffin weighing 400 lbs., was found in 1732. It contained a skeleton, several urns, and coins of Vespasian and Severus. ("Gough's Camden," vol. ii. p. 257.) Here stone cists have occasionally been dug up containing human

remains,—one, those of a mother and her infant. In another was a coin of Antoninus Pius, and in a third two small earthen vessels. On a spot near the Nen and Stibbington, a little to the east of the camp of Durobrivæ, an "ustrina" or place for burning bodies was found, still covered with the charcoal and ashes of many a funeral pyre, mingled with innumerable small fragments of bones and pottery. Also in making the turnpike road from Kote's cabin to Wansford, urns of different shapes and colours, some containing coins, but all filled with burnt bones, were found, serving to illustrate the Roman habit of urn burial.

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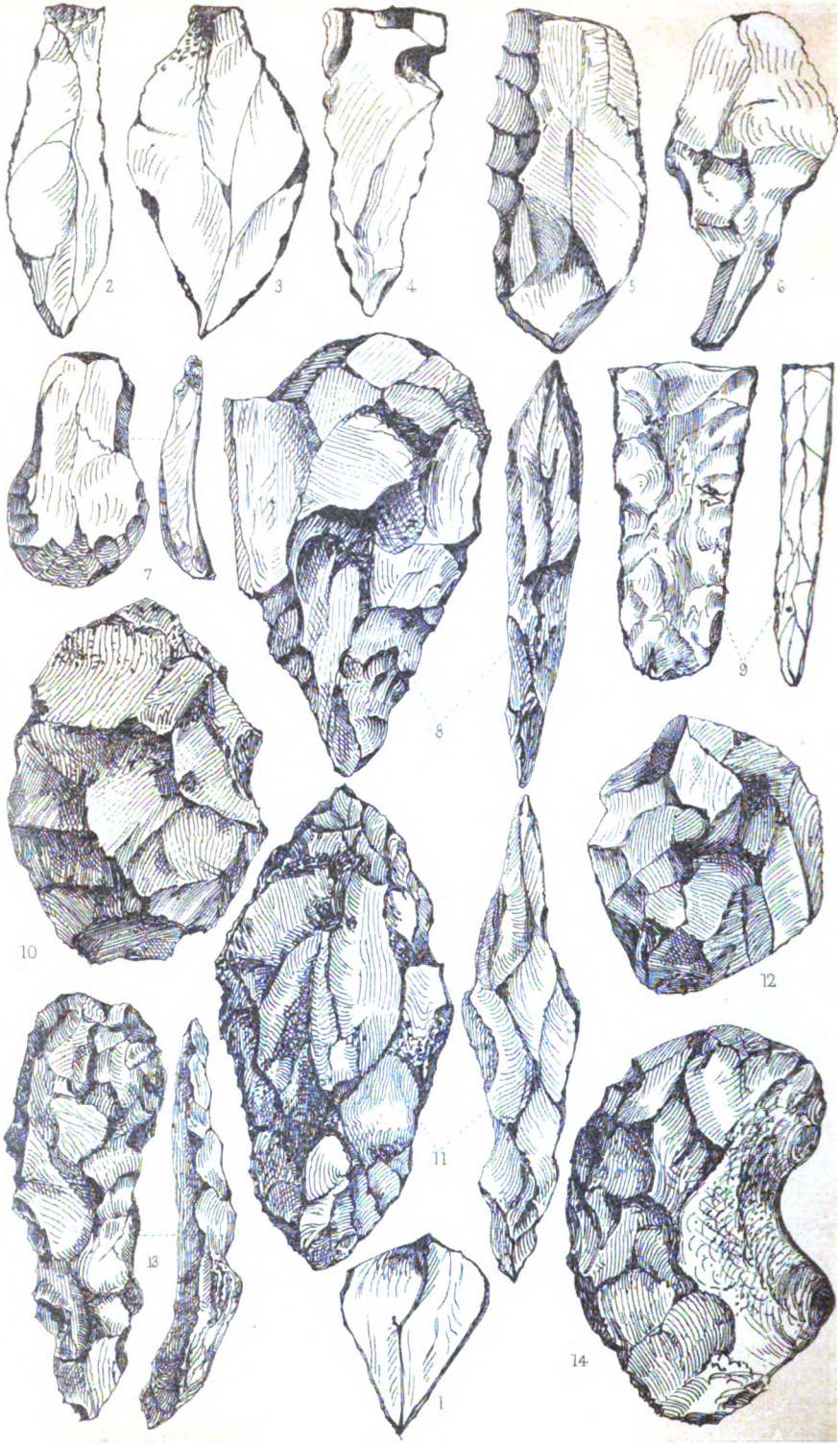


FLINT IMPLEMENTS FROM CISSBURY

Hanhart lith.

THE FLINT-WORKS AT CISSBURY.

By JOSEPH STEVENS, Associate of the British Archæological Association, etc., etc.

Of the many interesting features of Sussex, the broad and bold South Downs, extending from Beachy Head to the Hampshire border, may be considered as among the most attractive to the tourist and student of nature; for here the enquiring may find, according to predilection, an endless source of interest. The stunted wild flowers, the wild and solitary hill birds, the lepidoptera and the mountain mollusks, the wandering bees and the agile grasshoppers, furnish an abundant mental harvest; some small items in their life history already gathered in, but by far the larger portion remaining undisclosed. Again, the solid hills themselves await only the mattock and shovel of the geologist to reveal their long-entombed relics of a world, more fluctuating, perhaps, although as largely populated with animal forms as the present earth.

The earthworks, also, crowning their summits have their page of instructive, but misty history, respecting the early and rude tribes whose remains testify that they occupied for purposes of war these places, now, happily for ourselves, the scenes of peaceful industry.

Of these magnificent hills, Cissbury more particularly claims the attention of the present paper, from the circumstance that much rude flint cutlery has been found within its ramparts, from which it might not have been inaptly designated, in the long past, as the siliceous Sheffield of Sussex. Subsequently it might have been occupied by the Romans as one of their coast defences. Eminences so framed for defensive purposes would naturally have been used by any people resisting invasion from the sea, as they would have been re-

tained and organised for purposes of subjugation by a successful invader. From the character of the earthworks, enclosures, the barrows, dykes, trackways, and other vestiges, there can be no doubt but that these hill fortresses have sheltered successive waves of population, from the early Celtic tribes to the later more civilized Gallic people, and onwards to the Roman and Saxon races. It is stated that the Gauls, of whom the Regni inhabited Sussex, established themselves in the South of England as an agricultural people about 300 years before the Christian era.[1] The Celtic Briton has left indelible traces of his presence in the names of most of the hills, villages, and rivers, of which Sedlescombe, Piecombe, Balmer, Falmer, the Ouse, and the Adur may be cited as having individually Celtic roots.[2] In the construction of most of the camps also, and in the tools and weapons of flint found so abundantly of late years on the Sussex downs. Of the Belgic settlers, who having obtained a footing in the southern counties, and established themselves along the coast, driving the original inhabitants before them, we have works of great strength in the Belgic boundary ditches, of which the Wansdyke, the fourth and last work of this kind, has a bank and ditch of no ordinary dimensions. It comes eastward into Hampshire from the Wiltshire downs, and has been considered as the boundary line between the deposed Celts and the Belgæ, who are thought not to have penetrated further in this direction.[3]

Although, perhaps, 3000 years have passed away since the Celtic people occupied these hills, the earthworks and trackways are as plainly traceable as at the time of their construction. The sharper angles have become weathered away by solution of the chalk; and on the slopes of the Downs some of the works are fast disappearing under the encroachments of modern agriculture. I observed at Cissbury rounded flint pebbles, and small lumps of clay-iron-stone, indicating that the lower tertiaries once capped the hills; but their denudation must have taken place long antecedent to the construction of the earthworks. The valleys beneath have, however,

[1] Prichard's Physical Hist. of Mankind vol. ii, pp. 106-109.

[2] Who the English Are. Brighton Herald, Sept., 1863.

[3] The Belgic Ditches, by Dr. Guest. Journal of the Archæological Inst., vol. viii., pp. 143-157.

since undergone very important changes. In travelling from Chichester to Brighton, the chalk hills bounding the aspect inland, and rising gradually northward from the flats, have the appearance of an ancient coast-line, and such, at no very distant period, they undoubtedly were; and the valleys through which the rivers now wind their way southwards from the Weald valley were arms of the sea, inland lakes,[4] but now silted up, occasioning the destruction of the ports that formerly occupied the mouths of the rivers during the historic period. In this way Lewes has become isolated from the sea by the silting up of the Ouse; Dr. Mantell having furnished evidence of the succession of stratifications from the marine up to the later freshwater in the valley levels.[5] Seaford, in like manner, has lost its harbour; the Adur and the Arun, likewise, once formed marine estuaries, the sea-shells found in the gravel of the former, and the discovery of British canoes,[6] constructed out of solid oak trees, in the banks of the latter, furnishing evidence that the estuaries must have had a much wider range than the present rivers. It has been suggested that lake dwellings might have occupied the marshes, the ground on which Piddinghoe church stands having much the appearance of a Crannogue.[7] And even as late as the Roman period, from the level at which coins and other Roman reliquiæ have been discovered, and from the scantiness of the superimposed deposits, the valleys must have been marshy, and not wholly reclaimed from the sea.

A great circle of camps guarded the Portus Adurni, or Port to the Adur, the series probably consisting of the Dyke Camp, the Camps at Wolsonbury, Ditchling Beacon, the Camp between Brighton and Lewes above Falmer, the Camp on the Brighton Race Course, and Hollingbury. The Port was one of the fortified harbours, by means of which the Romans secured their communications with the Continent. The river that used to flow by Aldrington is still called the Adur; *J dwr*, the water or river; but the same cause that destroyed the old town also changed the course of the river,

[4] Rivers of Sussex, by Mr. M. A. Lower. Sussex Archæolog. Collections, vol. xv., pp. 148-164.

[5] Wonders of Geology. Dr. Mantell, p. 64.

[6] Murray's Handbook of Kent and Sussex, p. 393.

[7] Hill Forts of Sussex, by Col. A. H. L. Fox. Archæologia, vol. xlii., p. 29.

which now flows into the sea at Kingston. The fate that has befallen Seaford is nearly an exact reproduction of what befel the Portus Adurni. The cliffs fell away to the eastward, and, as they did so, the land and shingle to the west was washed away, until at last, the sea being separated from the course of the river by a very narrow space, the first great storm threw the shingle into the river and stopped it up, thereby forcing the river to find an outlet to the westward. The Ouse and the Adur have both receded nearly equal distances to the westward. The little village of Portslade, situated further inland, arose out of the ruins of the Portus Adurni. From the down, behind Portslade, however, when the tide is very low, and the sea is very calm, long black lines, like sunken rocks, may be seen close along the shore to the south. The lines have a very peculiar appearance, and look like the ground plan of a town. In the map the spot is marked "rocky;" but from the nature of the soil, it is strange there should be rocks there; and there are no other rocks anywhere near, in short, not nearer than Brighton.[8]

The Sussex downs constitute a range of hills extending 50 miles from east to west, with an average width of about five miles; and their greatest elevation is about 800 feet above sea level. The South downs form the south-east part of the chalk-hills, extending around the Wealden valley on its north, west, and south sides; the steep chalk escarpments overlooking the vale having greatly the appearance of ancient sea-cliffs; and although the once almost impermeable forest of Anderida, which formerly occupied the Weald, has now given place to villages and cornfields, the entire district northwards, as seen from the top of Chanctonbury, has still a forest-like appearance. Southward from Chanctonbury, the country consists of round-topped hills, combes, and valleys, the chalk surface sloping gradually towards the sea. At the period of the Celtic Britons the distribution of hills and valleys, in outline, was much the same as at the present time; but the greater portion of the lowlands, then, and for centuries after, existed in the shape of heath, forest, and morass.[9] Straggling patches of upland, near the hills, were probably

[8] Roman Camps and Roads. Brighton Herald, Sept., 1863.

[9] Hume's Hist. of England, chap. 1.

cultivated in later British times, but the rest consisted of interminable forests; the whole country was said to be one continuous "*horrida silvis;*" and in the woods roamed the Celtic ox and red deer, while the jungle sheltered the brown bear, wolf, and wild hog. The soil abounded in marshes, and stagnant water, which rendered the climate cold, rainy, and unhealthy;[10] and necessarily restricted the natives to the drier hills, where they obtained pasturage for their flocks, and shelter from their enemies within the hill fastnesses. Doubtless they penetrated the forests in search of food by hunting, but their homes were on the drier uplands, and their trackways were, in consequence, chiefly confined to the margins of the hills.

It has been considered that, at this remote period, these hills were divided into natural groups by an expanse of water and marshland,[11] the great impassable forest already mentioned blocking the passage northward; and that the earthworks on the hills were occupied by tribes who held communication with each other by the means of canoes; and, as in the case of all uncivilized nations, were more or less always in a state of hostility. According to Tacitus the Britons were not united under one head,[12] and, at the time of Cæsar, the Celts and Gauls were perpetually warring against each other, and acted in unison only when some foreign invader appeared on the spot. It was this want of union, chiefly, which brought the natives beneath the Roman yoke. Internal dissensions split them up into sections, so that the compact foreigners carried the country piecemeal. As it was, however, the Britons succeeded in withstanding the Roman generals 260 years, from the coming of Cæsar to the time of Severus.

From the extent of most of the fortifications it is likely that these predatory raids, although of frequent occurrence, were never of long duration, and that the attacking force was insufficient in numbers to completely beleaguer the enemy's earthworks, and thereby cut off all supplies of food and water from the neighbouring valleys; and, as regards water, no provision for it has, I believe, ever been observed in any earthwork considered as strictly British.

[10] Cæsar. Comment. de Bell. Gall., lib. v., c. 12.

[11] Hill Forts of Sussex, by Col. H. L. Fox. Archæologia. Feb. 6, 1868.

[12] Tacitus. Agric., c. 12.

It will not be necessary to furnish any detailed account of the Sussex earthworks, further than to observe on some of the peculiarities by which they are thought to have been connected with the Celtic period, and therefore associated with the implements of stone. Further, the ground has already been trodden by eminent men, who have described the various fortifications, the probable time of their construction, and the people by whom they were raised. Thus, the Rev. Vernon Harcourt,[13] and the late Editor of this Journal, the Rev. Ed. Turner,[14] in some very able papers, considered that some of these hill forts were of British origin, constructed for defensive purposes, and had been used as places of Druidical worship. Mr. J. V. Irving,[15] again, regards them as entirely military, and treats their modes of construction after the methods of castrametation laid down by Vegetius and other military authorities. Mr. Horsfield, further, has written on the military character of the works, and has assigned Hollingbury to the Roman period; while Mr. Irving[16] entertains a similar view respecting Cissbury. A more correct interpretation, however, regarding their origin and nature, may be attributed to Col. A. H. Lane Fox, who, in a series of elaborate and almost exhaustive papers, contested that they are mostly of British, and not Roman origin, constructed during the later stone period for defensive purposes; and that Cissbury and some others of these hills had been occupied for the purpose of manufacturing flint implements. The following is a general statement of the conclusions at which he has arrived:—

"The size and outlines of the intrenchments are regulated by the size and outlines of the hills upon which they stand; that is to say, the whole hill top, or the whole available portion of it, appears to have been fortified by a line of ramparts drawn along the brow, in the position best suited for defence, and with but little regard to the amount of space inclosed within its circuit; whereas the Roman practice was to regulate the outline and arrangement of the camps in accordance with the strength of the force intended to occupy them, and with a chief regard to the considerations of discipline and interior economy. Considerations of the supply of water and fuel are, in these camps, invariably sacrificed to the necessity the people appear to have been under of occupying the strongest features

[13] Celtic Antiquities, near Chichester. Vol. i., Sussex Archæolog. Trans.

[14] Sussex Archæological Transactions, vol. iii.

[15] Journ. Brit. Archæolog. Assoc., vol. x.

[16] Journal British Archæolog. Assoc., vol. xiii.

of the country. I did not meet with a single example in Sussex of a fort having a supply of water within the inclosure, and the majority, like Cissbury, are at a considerable distance from a spring. Nor could fuel have been obtainable anywhere in their immediate vicinity. This, according to Vegetius, was a primary requisite in the selection of a Roman camp.[17] Accordingly, we find amongst those camps which are of undoubted Roman construction, many of which have been figured by General Roy, no instance of a neglect of these principles. The strength of the ramparts in the Sussex forts corresponds inversely to the natural strength of the position. In some places where a steep declivity presents itself, there is no rampart, implying that the defence of those places must have been confined to a stockade. The ditch, generally on the outside, was sometimes in the interior of the work. Outworks were thrown up upon commanding sites within 200 or 300 yards of the mainwork. The ramparts at the gateways were increased in height, and were sometimes thrown back so as to form a re-entering angle, and thus obtain a cross-fire upon the causeway over the ditch. This is not the characteristic of a Roman gateway. The inhabitants in the interior of these works frequently dwelt in pits, which was not the Roman practice. These intrenchments are in an especial manner associated with evidence of the manufacture of flint implements, found scattered in great abundance upon the surface; and it must be admitted that the Romans did not employ that material for the construction of their tools and weapons."

Further, the forts occupy the highest points of the hills, and the gateways open towards the ridges of the neighbouring Downs, evidently with the object of commanding the entire view of the country round, and every approach to the hills.

Regarding the different hills on which Celtic remains have been observed, Wolsonbury contains a large number of pits, evidently the remains of habitations, and flint flakes were of frequent occurrence here. Flint flakes, again, strew the turf on the Cliff Hills around Lewes; and pits are observable within Mount Caburn. The Castle, at Newhaven, contained wrought flints; and I picked up some flakes and a beautifully wrought scraper at the base of the hill fortress at Seaford, in 1870 (see Fig. 7). In a letter from Mr. J. Evans, F.R.S., dated Oct. 6th, 1866, in reply to an enquiry from me respecting some Hampshire implements, he writes:—

"I found a celt of the same form as yours, but only 5 inches long, last week on a spot from which a barrow had been removed, on the Downs west of Newhaven; also a slingstone, and a large number of flakes, cores, and one or two scrapers at the same time."

[17] Vegetius, lib. 1, c. xviii.

In a second letter, dated October 23rd, 1866, Mr. Evans states:—

"During the last three days, in walking over the South Downs, near Eastbourne, I have found innumerable flakes, several cores, and ten or twelve of the scrapers, some of them remarkably good specimens. Your celt, No. 6, is extremely like the one I found near Newhaven. No. 4 and 5 I could match exactly from the South Downs; and among the flakes I found in Sussex many have the edges or points worn away to some extent by use, as if they had been employed for scraping bone or hard wood."

The interior of Beltout was likewise strewed with flakes of flint, artificially produced, and a few flakes lay about the greensward on the Dyke Hill. According to Mr. Boyd Dawkins evidences of an extensive flint implement manufactory exist near Hollingbury, which would lead one to the conclusion that this earthwork is also of British construction.[18] Chanctonbury contained humanly wrought flints, some of them showing secondary chipping; and at Highdown, probably a later work, Col. Fox discovered a weapon of bronze, iron nails, some articles of bone, rude pottery, and human remains, perhaps the contents of a grave of the Saxon period. The Lewes Museum contains a few chipped celts, and Dr. J. W. Smart discovered some wrought flints, at Ore, near Hastings, which are all of the chipped kind, of which figures may be seen in the "Sussex Archæological Collections," vol. xix.

Among[19] the earlier notices of Cissbury, Camden, in his Britannia, describes it as—

"A military fort, compassed about with a bank rudely cast up, where the inhabitants believe that Cæsar intrenched and fortified his camp. But *Cissbury*, the name of the place, plainly shows that it was the work of *Cissa*, who was the second King of this Kingdom of the Saxon race; and who, with his Brother *Cimen*, and a considerable body of Saxons, landed on this coast at Cimen-shore, so called from the said Cimen, a place which now has its name, but that it was near *Wittering*, King Cedwalla's Charter of Donation made to the church of *Selsey* is a convincing proof."

Rapin likewise attributes Cissbury and Chichester to Cissa.[20] Mr. Cartwright[21] writes of it as a very ancient en-

[18] Archæologia, vol. xlii, foot note at p. 40.
[19] Gibson's Edition, 1622, p. 204.
[20] Hist. of England, vol. i., p. 59.
[21] Parochial Topography of the Rape of Bramber.

campment on the Offington Estate, inclosing 60 acres; and that the deep indentations on the west side have the appearance of rude huts. These, with the presence of vessels of unbaked clay and burnt bones, give it the appearance of being British; but the further discovery of Roman coins, &c., renders it evident it was used by the Romans. Similar views are expressed by Mr. J. D. Parry.[22]

Mr. M. A. Lower again describes Cissbury as—

"A remarkable hill three miles from Steyning, and four from the sea, on which is an ancient circular or oval earthwork, defended by a double trench. Vulgar tradition derives its name from Cæsar, of whose camp they pretend to show the site; but it is, without doubt, a Saxon fortification, and this is proved by some of our oldest historians, who say that, after the battle fought at Mercreadesburn, in the year 472, they founded this place for their defence, giving it the name of Cissa's-burgh, from Cissa, the son of Ella, afterwards King of Sussex, which name, in the course of time, became corrupted into Cissbury."[23]

A similar view regarding this fortress appears at page 335 of Murray's Handbook of Kent and Sussex.

The powerful fortifications at Cissbury appear to occupy a central position, and command the whole of the country between Chanctonbury and the sea. The ramparts, as in the case of most of the works on the Sussex hills, conform to the outlines of the hill, the space inclosed being about 60 acres. The defences are comparatively weak where nature has rendered the hill difficult of access; but where the slopes are easy, as on the south-west side, so as to favour the approach of an enemy, the ramparts are increased in size and strength, and an additional smaller defensive work extends along the outside of the ditch. The fortress has four entrances; one facing eastwards, a second on the north side, while two face southwards, one of which shows a slightly re-entering angle, and the ramparts in two of the entrances are increased in height. Several rectangular enclosures occur within the camp, facing the entrances, which Col. Fox considers might be somewhat later works, and were, perhaps, intended for the use of those who had to guard the gateways. An ancient roadway leads down the hill, on the south side towards Broadwater; and on the same side artificial terraces are

[22] Historical and Descriptive Account of the Coast of Sussex.

[23] Compendious History of Sussex.

observable, which have been considered as vineyards. It is likely the occupants of the camp obtained their water in this direction. Mr. Turner and Mr. Cartwright have, however, suggested that it might have been obtained from Aplesham, a covered way having probably existed between this place and the camp. On the west slope of the camp a number of pits—perhaps as many as 50—are located, of various sizes, some as large in diameter as 60 or 70 ft.; and very various suggestions have been furnished regarding their origin and uses. Mr. Cartwright thought that they were the sites of rude huts; and Mr. Turner considered the camp to be British, and that the pits were—

"Dish barrows, holy consecrated recesses, formed for the especial purpose of forwarding the celebration of the religious ceremonies of the Britons during their sojourn on the hill forts."

Although Col. Fox, as previously stated, has since assigned very different uses for them, it does not follow that Druidical [illegible]

Mr. Ernest Willett, of Brighton, completely cleared out one of the pits on Cissbury, during last summer, and read a paper on his discoveries at Brighton in November last. The pit was 25 ft. in depth, and 14 ft in diameter, and was filled with chalk rubble containing rude flint implements. At the bottom of the shaft he found several antlers of Red Deer, which had been used as picks in excavating the chalk. Galleries were found radiating from the main shaft, evidently made in extracting the seams of flint for the manufacture of implements. These galleries were from 2 to 3 ft. in height, and communicated with each other. No signs appeared of fire-places or discoveries made of pottery to show that the pit had been used as a dwelling. During the summer Mr. Tyndall, also, had opened a pit down to its base, found 2 skulls of Bos primigenius, a skull of [illegible] [illegible] correlate the Cissbury [illegible] "Primes' Graves," Norfolk.

burial places; from one of which, situated on the southern slope of Cissbury, Capt. Wisden, of Broadwater, obtained some well-shaped Roman urns. At the residence of this gentleman, during our late visit, we had an opportunity of inspecting these vessels, as well as some well-wrought flint implements of various types, obtained from Cissbury, similar to those removed during the excavations made by Col. Fox.

During his explorations at these pits Col. Fox removed about 500 or 600 implements of various kinds, most of them very rude, and with one solitary exception chipped. And from the presence of traces of fire-places containing charcoal, from the occurrence of bones of animals that had served for food, as *Bos longifrons*, *Capra hircus*, and *Sus*, from the enormous number of wrought flakes, as well as of Celts and other implements, some of them broken either in manufacture or in use, he concluded that, while some of the pits had been used as dwellings, others had been occupied for the purpose of *shaping* tools and weapons of flint. From the total absence of metal of any kind, and the character of the animal remains, he inferred that the implements were later than the drift, and that they might be classified as belonging to the neolithic or later stone period. The pits were found not to have been floored with clay, or pitched with stones, so that they could hardly have been tanks for water or pens for cattle. Mr. J. Evans has given his assent to these views, that the smaller pits might have been the habitations of the workmen, while the larger served to furnish material.[26]

I have had no opportunity of observing the *Upper Chalk* of Cissbury; but, as in the Hampshire cretaceous deposit, the flint layers run in planes through the chalk at intervals of from 2 to 6 ft., excavations of considerable depth, placing the Cissbury chalk on an equal footing, would have been requisite to reach the flint stratifications, in order to the obtainment of a sufficiency of material.

Late important discoveries have been made of excavations in the chalk for the purpose of obtaining flint for the manufacture of implements. The so-called "Grimes' graves," lately explored by Mr. Greenwell, in Norfolk, were dug for this purpose. They are about 250 in number, circular in outline,

[26] Archæologia, Vol. xlii., p. 73.

varying from 20 to 60 ft. in diameter, placed irregularly at about 25 ft. apart, the whole covering a space of about 25 acres. The tools used as picks were antlers of deer. In other parts of Norfolk similar holes have been discovered, known as "Danes' holes," which were further found to have been occupied as habitations. They are from 20 to 50 ft. in depth, connected by passages at the bottom, and in them were found heaps of chipped flints, evidencing past labour, besides bones of *Bos longifrons*, *Deer*, and *Wolves*.[27]

In further testimony to the antiquity of the earthworks at Cissbury flint implements were found at several places along the ditch, at the base of the rampart, lying on the floor of the ditch, beneath 3ft. of surface soil, whence it would appear conclusive that the instruments must have been wrought subsequently to the construction of the earthworks.

Among the implements taken from the pits some were found in form like the true palæolithic tools found in the valley-drifts, thus supplying a link in type between the more ancient and the later implements. They are not, however, to be considered older on account of their form, as they merely show that, at totally different periods, implements were constructed resembling each other, the more ancient types having been retained. This resemblance to the drift form is not so remarkable, as somewhat similar shaped tools occur among the neolithic implements of Hampshire; and with reference to works of human construction, of comparatively recent times, it is singular that implements resembling the European drift forms have been found in the mounds of North America, and they are considered as having been wrought by the mound builders.[28]

At our visit to Cissbury, in August, 1871, we succeeded in finding about two hundred implements of various forms, mostly of rude character, and chipped into outline. They consisted of the so-named celts or chisels, picks, a solitary drill, well-wrought flakes of various forms, finely chipped lance-heads, implements of the oval drift-form, clumsily wrought tools pointed at both ends, choppers with rounded backs for grasping

[27] Journal of the Ethnological Society, Jan., 1871. Art.: "On Grimes' Graves," by Rev. W. Greenwell.

[28] Flint-chips, by Mr. E. T. Stevens, p. 441.—Also in South Africa. See vol. xxiii., p. 325.—*Editor.*

in the hand—of similar type to some instruments taken from a cave of the south of France—besides slingstones, and a single scraper found by Mr. Wonfor. The paucity of scrapers was observed by Colonel Fox, as well as the scarcity of boring tools, such as awls and drills. At the working places the excavated materials consisted of innumerable chips, flakes, and blocks of flint, or cores, with broken specimens, evidently mere waste resulting from the manufacture of better tools. A film of wrought flints appeared to occupy the entire surface of the camp, as I observed specimens in all the mould scraped out by the rabbits; and in those lately brought to the surface the patination was recent, while in the flints that had suffered long exposure the oxydation of surface had penetrated in some instances to the depth of a quarter of an inch. I found no calcined stones on the hill, and they are not mentioned by Colonel Lane Fox, which would imply that "stone-boiling" was not practised at Cissbury. In Hampshire charred stones occur at all the flint-working sites, and they were evidently employed for culinary purposes.

In individualising the different wrought flints, a great number found in the camp consisted of flakes containing the outer crust of the flint, evidently the first series chipped from the parent blocks. The secondary flakes contained two facets on one surface, the other, or core surface, one. Some of these were pointed, and leaf-shaped (see fig. 1), and might have formed arrow-heads; while the longer specimens were, perhaps, employed as knives, and for scraping bone or wood. Figs. 2 and 3 have additionally wrought surfaces, and were probably used as knives or darts, most of these specimens exceeding in character and outline the obsidian darts used, in recent times, by the natives of New Caledonia; while fig. 4 was evidently intended for a formidable missile, it being provided with a notch for fixing to the staff. The implement (fig. 5) is wrought obtusely at its back, the opposite edge being sharp, and knife-like; it was probably used for skinning small animals. This type somewhat represents fig. 3 in Colonel Fox's illustrations.[29] Fig. 6 represents an instrument of the drill form, perhaps for punching holes in the untanned skins used for clothing. It has a point, and a bulb for grasping in the hand.

[29] Archæologia, vol. xlii.

In the scraper found at Seaford (fig. 7), the bulbous part is wrought into form by the means of some fine chipping. Similar instruments are used, in handles, by the Esquimaux for the purpose of cleansing skins ; but the handles of these early specimens are lost, if at any time they had any. Scrapers were extremely rare on Cissbury, only four specimens having been found by Colonel Fox, and one by Mr. Wonfor. Fig. 8 somewhat resembles the pointed drift implements, it having a cutting edge mostly all round. Four specimens, such as fig. 9 represents, were picked up at different parts of the camp. They are all of the same length (three inches), beautifully wrought, and were evidently intended for lance-heads. Being quite truncate at one end, they have been considered as broken specimens. I am, however, inclined to think, from their uniform length, and the appearance of the truncate ends, that they are perfect instruments. If they are broken their agreement in form and length implies that they must have fractured in use at their point of junction with the staff. Fig. 10 shows an oval celt, resembling the drift form, of which mention has been made, corresponding with figs. 10 and 11 in Colonel Fox's plate. Fig. 11 appears to be a ponderous form of pick, pointed at both ends, which might, when lashed to a central handle, have served to obtain the flints from the chalk of the hill. Fig. 12 shows the ordinary, many-facetted sling-stone. These are met with of various sizes chipped rudely circular. Fig. 13 is a smaller form of axe or pick, chisel-like at the broader end, and pointed at the opposite one. It has a depression at the centre apparently for fastening. (See side view of same figure.) The large kidney-shaped implement (fig. 14) is of a similar type to fig. 1 in Colonel Fox's plate; it is stated as resembling the heavy choppers found in the Le Moustier cave, in France. A large portion of the circumference of the instrument is wrought to a cutting edge, the remainder being rounded, or left unwrought, to enable the operator to grasp it in the hand, for the purpose perhaps of smashing bones, in order to obtain their marrow. Of these figures, one to seven are represented two-thirds the actual size, the larger ones being reduced about half. (The linked figures represent the front and side views of the same implements). It has been thought that the Cissbury implements as a series, and

from the absence of rubbed specimens, are ruder and perhaps earlier than those from other districts; but I can observe but little difference between them and those found in North Hampshire. It is probable that most of the better tools and weapons were removed for use, and the remaining ones were insufficiently finished. Some of the types differ somewhat from those found in Hampshire, and in Hampshire we find a proportionately larger number of polished specimens; but they agree sufficiently to render the opinion defensible that they are all the work of much the same period.

The chalk hills of North Hampshire are crowned with camps similar in character to those of Sussex; and, being inland, they furnish, perhaps, more complete examples of British border camps. Their distance from the sea rendered them of less importance to the Romans in effecting a footing in the country, consequently fewer traces of Roman occupation are found upon them. Like those on the South Downs, the fortifications conform to the outlines of the hills, and remains of British dwellings are observed within them. In illustration of the series occupying the chalk range dividing North Hampshire from the Kennet valley, it will be seen that the works on Beacon Hill are similar to those on Cissbury. The enclosure contains eight acres, and the ramparts consist of a single wall and ditch on the outside, conforming to all the irregularities of the upper part of the hill. The defences are deep and powerful on the south side, where the slope of the hill renders ascent easy; but on the north aspect, where the approach is difficult, the slope of the chalk being almost vertical, there is hardly any ditch. The gateway opens south, and commands the entire crest of the neighbouring downs; and the ramparts at the entrance are increased in height, and form a slightly re-entering angle. An outwork occupies the extremity of the ridge southwards, at about 200 yards from the camp; and in the valley on the west, sheltered on the east and north by the hill, a series of rectangular enclosures marks the outlines of a British village, from which a winding path ascends to the gateway of the fortress. On the eastern slopes of the hill there are some large rectangular works, of similar character to some enclosures on the Wiltshire downs stated by Sir R. Colt Hoare as places where the Britons herded their

cattle.[30] On the flats, at the base of the hill southwards, a cluster of ten tumuli shows the ancient burial place of the British people.

An important difference, however, exists between Cissbury and Beacon Hill. Remains of the older Tertiaries are found on both; and within the earthworks of Beacon Hill circular pits of supposed British origin lie beneath the sod; but the chalk here is of the Lower kind, and therefore comparatively void of flints. The circles could not, in this case, have been dug for the purpose of obtaining material for the manufacture of implements, as on Cissbury; and it is, perhaps, on this account that tools and weapons of flint were chiefly formed; at all events, they are constantly found on the low hills, composed of the chalk-with-flints, overlooking the watercourses of North Hampshire.

The Vale of Kennet might be considered to correspond with the Sussex *meres*, save that the alluvia of the former are all of freshwater origin; for here the peat has covered for centuries the relics of a stone-using people, with the remains of animals, some of whom are now extinct in England, who were contemporary with man, but suffered extermination as the encroachments consequent on human progress rendered their conditions of existence untenable. The peat varies from 5 to 15 feet in depth, "and abounds with branches and other remains of trees, viz., fir cones, nuts, and seeds, and also with the bones and horns of oxen, red deer, roebucks, horses, wild boars, and beavers. A human skull of high antiquity has also been found in it, at a depth of many feet, at the contact of the peat with a substratum of shell marl. It was accompanied with rude instruments of stone."[31] At Thatcham the peat has yielded finely formed polished flint hatchets. Another geological formation of the valley, known as the Lower marl, has furnished a large number of species of freshwater shells, with the following remains of mammalia, which were found to be more plentiful along the edge of the valley:—*Bos primigenius* and *Bos longifrons*, *Cervus capreolus* (roebuck), *C. elephus* (red deer), *Equus*, *Sus*

[30] Anct. Wilts, vols. i. and ii.

[31] Trans. Geolog Soc., vol. ii., Dr. Buckland; and Geological Hist. of Newbury, Mr. R. Jones Blackett, Newbury, 1854.

scrofa (pig), *Canis lupus* (wolf), *Lutra vulgaris* (otter), *Ursus spelæus* (bear), *Castor Europæus* (beaver), *Arvicola* (water rat). These testify that, in early British times, wild oxen and red deer pastured in the open forest glades, and frequented the watercourses. Beavers built their lodges in the rivers. The wolf, wild boar, and bear had their lairs in the jungle, and man, the builder of the hill fortifications, had to contend against human and animal antagonists chiefly with implements of stone. The wolf lingered on longer than most of his contemporaries, for we find in the year 1212, when the neighbourhood around Kingsclere was all forest, that an entry occurs of "five shillings to the groom of Master Ernald de Auckland, for a wolf caught by his master's dogs, at Freemantle."[32]

In North Hampshire the signs of Celtic occupation are more observable as you approach the loftier chalk hills; which would appear explainable, as has already been shown in the case of the Sussex hills, from the necessity the inhabitants were under of living near their hill fortresses. Besides, the deep clays were densely wooded, rendering the lighter chalk brows the more favourable places for occupation. The soils, being light and porous, were more readily cultivated, and the open glades along the edges of the forest furnished pasturage for their domestic cattle. It was the custom of the Celtic people to build their houses in the skirtings of the forests, and fortify them in various ways. Their summer habitations consisted of stakes driven into the ground, and covered over with boughs of trees; and their winter huts were pits dug in the earth, and protected from the inclemency of the weather with superstructures of wood or wattle. They were placed generally in groups, forming villages, frequently stationed on the low hills, overlooking the watercourses; and some of their deeper winter retreats were so cunningly constructed as to escape detection by their enemies. These villages were, in some instances, surrounded by a rampart and ditch, as a protection from outward attacks, and for the security of their cattle. The Britons are said, by the ancient writers, to have lived in wretched huts;[33] and both Cæsar and Strabo, writing of their towns, state that they were found in the forests and

[32] The Patent Rolls, May 31st, 1212. [33] Diodorus Siculus, lib. v., c. 8.

wooded districts.[34] As civilization advanced, they effected clearings in the woodlands; and, in order to render the heavy clays more workable and productive, the later Belgic Britons chalked the soil, as is the custom at the present day. Thus, Pliny states[35] that—

"The people of Britain have found out another kind of manure for their grounds, which is a fat clay or earth called 'marle.' Of those marles the white ones are the most valuable; of these there are several kinds; first, that which has the most sharp and pungent taste; another is the white chalky marle, which is most used in Britain, its effects are found to continue 80 years, and no man was ever yet known to have manured the same field twice in his lifetime."

We have testimony to the above statement of the social condition of the British people, in the remains of their pit-dwellings, found grouped both on the hills, and in the woodlands of North Hampshire, as well as in several parts of the neighbouring county of Wiltshire. They appear, however, not to have been all occupied for the same purpose, some of the pits representing dwelling places, others, perhaps, storehouses, or granaries. Mr. E. T. Stevens, of Salisbury, considers the Whorl Hill pits, in Wiltshire, and the pits on Danebury Hill, in Hampshire, as storehouses for grain. The presence of these would imply foresight in the natives, in making a provision on the hills in the event of having to seek shelter from some attacking force. The pits, used as habitations, further show, by their reliquiæ, that they were not all of one period, or tenanted by people all equally advanced in the construction of their pottery, tools, and weapons. The discovery was made not long since of the vestiges of what seemed to be a feeble tribe, who inhabited a subterranean village at Highfield, near Salisbury. Their wigwams were separate, and in groups, sunk 10 feet in the gravel, and resting on the chalk; and were reached by the means of circular shafts; and the huts had moveable covers of wattle and burnt clay. These poor people had an early knowledge of weaving, and cultivated some of the cereals, as shown by the discovery of some impressions of corn grains in the clay, and the presence of rude hand grain-rubbers. Their only implements were of

[34] Cæsar Comment. de bell. Gall., lib. v., 21.

[35] Pliny's Nat. Hist., lib. xvii., c. 6.

bone and stone, and they used, besides, a primitive form of stained pottery, which bore no traces of the potter's wheel.[36] Similar traces of the flint-workers in Hampshire have lately occurred during the excavation of a British winter dwelling, and its attendant passage, at Finkley, near Andover, in which were found pottery, and flint implements of similar description to those found in the pit dwellings of Wiltshire; while the tools of flint correspond with those found in the surrounding fields at Finkley. Some further light was thrown on the state of civilization of the occupants of the dwelling by the discovery of articles of bone and wood, and whorls of chalk, which had evidently helped to construct some simple apparatus used for spinning. Quantities of charred flints also were thrown out of the pit, indicating that the inhabitants had practiced "stone-boiling." The "pot-boiler," or heating-stone, marks a very rude state of social life, as it is thought to have subserved the purpose of raising the temperature of water, or for roasting food, when, there being no metals, the simple pottery of the period was not sufficiently good to resist the direct action of fire.[37]

Further evidence of the early British races can be adduced in the many sites for flint-working observable on the low hills overlooking the water-courses of North Hampshire. On both sides of the Upper Test Valley spots occur, which were evidently places of perhaps temporary occupation, at which instruments of most of the types recognised as belonging to the later stone period are found—Celts, scrapers, arrow-heads, hammers, mullers, awls, drills, spear-heads, slingstones, and charred flints, used, perhaps, to construct earth-ovens, or as heating-stones. Sections of rude grain-rubbers are also commonly present at these sites. And on the east side of the valley a cluster of nine hut circles, lately explored, brought the gratifying conclusion, from the nature of their contents, that we had lighted on the simple dwellings of those who had wrought the implements found along the hills. The pits extended from the upper slope of the hill almost down to the edge of the valley, and were about 12 feet in diameter, and five in depth, and had entrance passages. In one of them a

[36] Flint Chips, by Mr. E. T. Stevens, p. 57.

[37] Tylor's Early Hist. of Mankind, pp. 262-269.

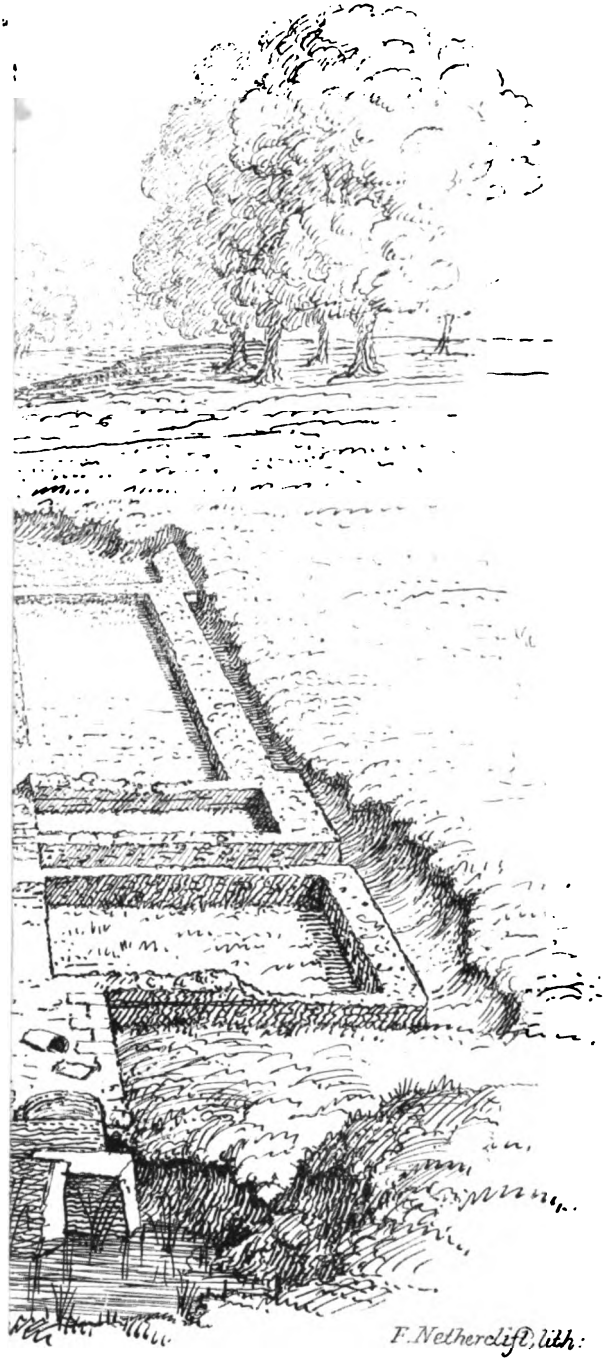
quantity of large flints indicated that its superstructure must have been partly formed with this material. Their contents consisted of wrought flints, similar to those found on the hills, bones of animals that had served for food, and that had evidently been exposed to fire; most of the long bones having been split open in order to secure the marrow. They consisted of those of *Bos longifrons*, *Cervus elephus*, *Capra hircus*, *Sus*, and *Canis*. Some of the smaller bones had been shaped into rude tools. Pottery of a coarse, hand-made character, with pieces of sandstone grain-rubbers, and spindle-whorls of chalk, were found in the centre of the circles, where the fireplaces had been, but not a particle of metal, save a lump of native ironstone, which had been taken from the Eocene drift, and used as a hammer, as heavy and available for the purpose, without knowledge, probably, of its valuable metallic properties. It was further found that the people had their cooking holes outside their dwellings, and practised "stone-boiling." A further testimony to British occupation occurred in the discovery of an early British gold coin, picked up in clearing away the mould from around the circles. Its weight is 96 grains, and the figures *obv.* and *rev.* are evidently rude imitations of some more perfect models, perhaps Greek ones, introduced among the Britons during their commercial intercourse with other countries, or brought over by the minters with the Gallic people.

In arriving at some conclusion from what has been written respecting the people who wrought the rude and primitive tools and weapons of flint found in Sussex, it might be inferred that they occupied hut villages in convenient places under shelter of the hills, and for winter use selected spots porous to water, and there dug their subterranean habitations; and when driven by outward pressure, resorted to their defences on the hills. Their powerful intrenchments, extent of pasturage, and ready access to the coast for fishing, imply that they must have been both numerous and warlike. They hunted the deer, wolves, and hogs in the extensive forests, then occupying the whole of central Sussex, and extending into Kent and Hampshire. In addition they had their short-horned ox *(Bos longifrons)*, swine, goats, and sheep, which they penned within the rectangular earthworks already stated

as occurring on the downs. They used flint as their principal material for purposes of war and the chase; and in the hands of a patriotic and powerful people, the heavy and sharp weapons formed with it must have been most formidable and destructive. It is further manifest that other materials, ready of access, and easily recognised, such as wood, bone, and horn, were made available; while the presence of articles of bronze, and occasional ones of iron, in their later burial mounds, testify that the metals were, to some extent, used; but it is singular that, at the flint-working sites, metallic objects are seldom, if ever, found. Regarding the last resting places of these people sufficient has been discovered, in the Sussex barrows, to lead to the belief that the occupants were, in all probability, the people who constructed the earthworks, and shaped the flint implements strewed so largely within their area. The tumuli on Beachy Head, explored by Sir J. Lubbock, Mr. Evans, and Col. L. Fox; and the barrows[38] of Alfriston, under the researches of the Rev. H. Smith, and the Rev. W. de St. Croix, were found to contain simple objects of flint and Kimmeridge clay, with a primitive form of pottery, the flint tools corresponding with the neolithic implements found on the hills, while the interments in the long and round barrows determine that successive races[39] *dolichocephalic* and *brachycephalic* have, in the long past, occupied the county. The former are probably the true Celtic interments of the stone period; the latter, and the secondary burials, sometimes found in the upper strata of the long barrows, probably belonging to the Belgic Gauls, and representing the period of bronze mixed with objects of stone, as well as that of the bronze and iron transition.

[38] Sussex Archæolog. Soc. Collections, vol. xxii.

[39] Two skulls, types of dolicocephalus and brachycephalus, were found in one *round* barrow at Alfriston, by Rev. H. Smith and Rev. W. de St. Croix. These are now in the Society's Museum in Lewes Castle.—EDITOR.



ON A ROMAN VILLA DISCOVERED AT TITSEY.

By GRANVILLE LEVESON GOWER, Esq.

IT has been suggested on several occasions that a map of the County should be published under the direction of the Surrey Archæological Society, pointing out the Roman roads, camps, and stations, that are known to exist in Surrey. Such a suggestion is, I think, well worthy of attention, and may, I hope, one day be carried out. In the neighbouring County of Sussex—as I see from the last volume of the "Sussex Archæological Collections"[1]—it is proposed to construct and publish a map of Roman Sussex, and information is requested respecting the traces of Roman roads, or the existence of Roman or Romano-British houses, tombs, &c., or the discovery of coins, in any part of the County. In a County like our own, where the ancient landmarks are fast disappearing, it would serve on the one hand to perpetuate the memory of such Roman remains as have been already discovered, and on the other, would in all probability, be the means of bringing to light others which have hitherto escaped notice. The County of Surrey, as has been elsewhere remarked,[2] was, owing to the poverty of the soil and to the vast tracts of wood and heath with which it was covered, very thinly peopled in the time of the Romans, and therefore it is not reasonable to expect that we should find many traces of their occupation; but still, as in the case of Titsey, where the discovery was purely

[1] *Sussex Arch. Coll.*, vol. xix. p. 209.
[2] *Surrey Etymologies*, by J. W. Flower, Esq.; *Surrey Arch. Coll.*, vol. iii. pp. 230, 232.

accidental, so elsewhere, I think, in the County may yet be found the remains of isolated Roman villas, military stations, or "hunting lodges,"[1] the existence of which has been hitherto unknown.

An account of the Roman antiquities of Surrey will be found in the Appendix to vol. iii. of Manning and Bray's "History of Surrey,"[2] in the introductory chapter of Brayley's "History of Surrey,"[3] and in a paper on the Archæology of the County of Surrey, by the Rev. Octavius Owen, F.S.A.;[4] I shall not, therefore, enter upon the general question as relating to the County, but confine myself to a description of the villa at Titsey, merely pointing out such evidences of Roman settlement as exist in the neighbourhood, and may help to throw light upon the subject.

The name "street," which occurs not unfrequently in the district, may be taken, I think, as some evidence of Roman occupation. In Limpsfield, the next parish to Titsey, we have "Lake Street" and "Grub Street," and in Westerham "French Street," all being old lines of way. In the parish of Nutfield, about seven miles distant, Manning[5] mentions that about the middle of the last century a quantity of brass Roman coins of the Lower Empire were found in an earthen vessel in the highway leading from the village towards Ham Farm. In Woldingham, a parish bordering upon Titsey on the north-west, Aubrey[6] relates that a copper coin of Constantine the Great was found. In the adjoining County of Kent, at Keston and at Holwood, both within a distance of ten miles, are Roman buildings of considerable extent.

Neither Manning and Bray, nor Brayley,[7] make mention of any Roman remains at Titsey, nor was there any local tradition of any such existing. The discovery was first made in draining part of the park in the autumn of

[1] *Surrey Arch. Coll.*, vol. iii. p. 231. [2] P. xlv. *et seq.*
[3] Vol. i. pp. 10–25. [4] *Surrey Arch. Coll.*, vol. i. pp. 4, 5.
[5] *Hist. of Surrey*, vol. ii. p. 266. [6] *Antiquities of Surrey*, vol. iii. p. 11.
[7] Aubrey, vol. iii. p. 16, mentions that in the field of Mr. Thomas Hatton, of Titsey, there had been found a copper coin of Constantine the Great, of the *medii moduli*.

1847; and although the broken nature of the surface of the ground and the cropping up of stones here and there had previously given indication of the remains of some building, there was nothing to warrant the supposition that it was anything more than one of an ordinary kind, which had fallen into decay and been removed. The season being then far advanced, no complete investigation was possible. The line of the walls was partly traced, one or two of the chambers laid bare, and a piece of tesselated pavement discovered, which, together with numerous fragments of pottery, wall frescoes and tiles, some pieces of glass, and one coin of which a figure and description is given at page 18,[1] was all that was then found. After a few years the grass was allowed to grow over the site again, and in this condition it remained until the summer of 1864. The excessive drought of that summer enabled me to trace the foundations of the whole building most completely; and partly at the suggestion of my friend Mr. C. Spencer Perceval I determined to begin the work of excavation. We commenced early in August, and the autumn being exceedingly favourable for the purpose, we were able to continue without interruption until the middle of November. The work occupied some time, as all the soil that came out was carefully sifted. It was commenced again in the spring of 1865, and finished by the middle of July. The result of these excavations, together with a description and drawings of such objects as were found there, will form the subject of the present paper. Such a description will, I trust, be of interest to the members of the Surrey Archæological Society, many of whom visited the spot at the annual excursion in August, 1865.

The villa is in a low situation at the foot of the chalk hill, close to the stream, which, being one of the tributaries of the Medway, has its principal source some four hundred yards to the east; and in the choice of the situation, the water doubtless formed a material element. To determine the access to it is difficult, the nearest ascertained Roman

[1] Plate IV. Fig. vi.

road[1] is that which, running from Newhaven through Lindfield[2] in Sussex, enters the county of Surrey at New Chapel, the southern extremity of the parish of Godstone, and passing through the lower part of that parish, which still retains the name of Stratton or Stretton (the Town on the Way or Street), ascends White Hill in Bletchingley,[3] and leads over Stansted Heath in Caterham, through Chaldon to Woodcote (the supposed Noviomagus), where it joins what is generally considered to be the Ermine Street. The nearest point of this road would be about five miles from Titsey. It is traversed, however, in the parish of Bletchingley by the road now known as the Pilgrim's Way; and if we may suppose that road to have been an ancient British track in use in the Roman times,[4] the villa was probably approached by this route, the Pilgrim's Way as it passes through the Park at Titsey running about 300 yards to the north of it. There are, however, some traces of a short piece of road approaching it on the western side, communicating with another old track which runs from Limpsfield Common over the hill to Chelsham, at Bottle Hill, in which parish are the remains of an old camp.[5] Besides this, the lane which I have mentioned as bearing the name of Grub Street formerly led to Titsey, and ran at no great distance from the villa. I may mention also, with regard to this latter, that having occasion to cut through the line of it during the past winter, we came upon fragments of

[1] For an account of this road, see Manning, *Hist. of Surrey*, vol. ii. p. 322; and vol. iii. Appendix, xlv.

[2] See *Gent. Mag.* 1781, p. 306.

[3] A little below this hill, near Pendhill House, overlooked by the fortified ground called Cardinal's Cap, in Caterham, were discovered in the summer of 1813 the remains of a Roman building and hypocaust. For an account of this, see Manning, vol. iii. Appendix, cxxi.

[4] *Historical Memorials of Canterbury*, Appendix to the "Shrine of Becket," note D, p. 260. Mr. Albert Way remarks:—"Although there are no indications of the Pilgrim's Road having been formed by the Romans, there can be little doubt that it was used by them, as evinced by numerous vestiges of villas and other remains of the Roman age near its course."

[5] Manning, *Hist. of Surrey*, vol. ii. p. 422.

Roman bricks and tiles exactly similar to those found at the villa. In the absence, however, of any better evidence upon this point than that which I have been able to adduce, the question must remain still open to doubt.

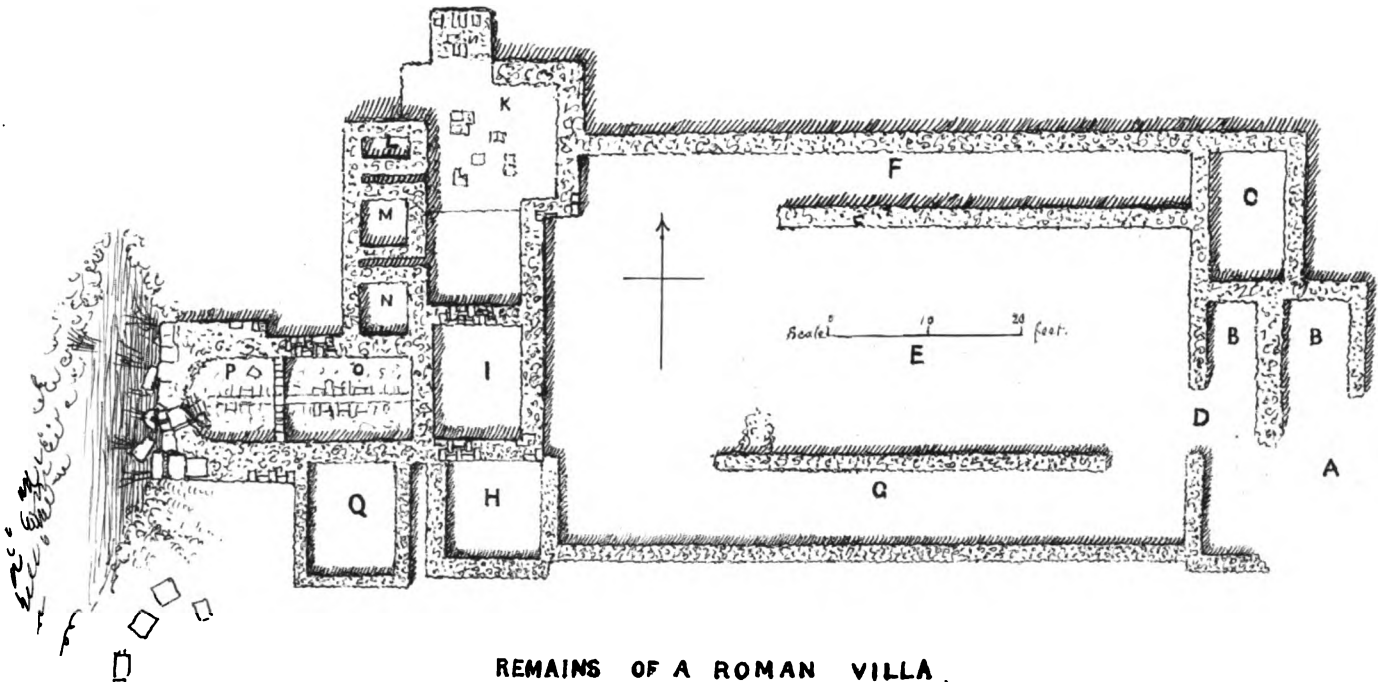
From the fact that the villa appears to have been completely isolated, and, although all the land round it for some distance has been underdrained, that no remains of any other villa have been discovered, I am inclined to think that it was one of several military stations which would occur at considerable distances from one another. We have evidence of Roman military works in a double trench and bank, which runs for some way along the ridge of the high ground in the parishes of Lingfield and Edenbridge, immediately above the Weald. These works may be traced very distinctly on the Beeches Farm, in the latter parish. There exists also another earthwork, now in great part obliterated, which runs over a part of Limpsfield Common, called Cearn Bank, at no great distance from the woods there called the Chart. About forty years ago a workman in digging stones along the line of it came upon a quantity of Roman copper coins;[1] but I have been unable to find out what became of them.

In judging of the site, it may be well to consider the nature of the country at that time. From the South Downs in a northerly direction right up to the sandstone ridge stretched the Weald, one vast forest of oak. The belt of green sand, which in this part of the County is very narrow, was probably all heath and moorland; and it was here at the foot of the chalk hill that the open country would begin, a tract of land comparatively fertile and well watered. These circumstances, together with its position at the foot of one of the passes through the North Downs leading towards London, may have made it a suitable place for a military station. Chosen originally with this object, in the later and more peaceful

[1] From information communicated to me by H. Cox, Esq., of Trevereux, Limpsfield. This gentleman has kindly presented me with three silver Roman coins, one of which, he believes that of Trajan, was found in his kitchen garden.

days of the Roman occupation of Britain, it may have passed into a simple villa residence; but whatever purpose it served, whether military station, villa, or hunting-lodge, it presents the usual features of a Roman building. The large courtyard with its tesselated pavement, rooms adjoining it small in proportion and few in number, and a bath considerably larger than any of the other chambers. In the construction of it the Romans availed themselves of those materials which came most readily to hand. The walls, which go down to a depth of three feet below the surface, are built as far as the ground-level entirely of flints, and above that partly of flints and partly of sandstone in small blocks; this stone being probably quarried on Limpsfield Common, as fragments of Roman pottery have been found at the pits there. At the ground-level is a bonding-course of flat red tiles about an inch in thickness; and at the angles, with a view to strengthening the walls, there are three courses of these tiles. The flints would have been easily obtained from the hill immediately above.

The outer walls are about 2 feet 6 inches in thickness, the inner ones vary from 15 inches to 2 feet. The annexed ground-plan will show the size and form of the building. The extreme length from east to west is 125 feet, the extreme width 60 feet, the width across the outer court 44 feet 6 inches. The entrance appears to have been at A, at the eastern end. At these points the walls terminate abruptly, but they are regularly finished off; and although careful examination has been made, there are no traces of their having been carried on so as to square with one another. Here may have been the vestibule or open porch through which the courtyard was entered. That portion of it marked B, though not completely separated from A, has more the appearance of a chamber. The floor of it is composed of flat tiles laid in concrete, and the walls had been painted green, as appeared by the pieces of stucco found there. A specimen of the colour is given at Plate III. It is possible that this may have been roofed in, and benches or seats arranged round it: it was here that a large flat



REMAINS OF A ROMAN VILLA,

TITSEY PARK.

slab of stone was found. C is divided from B by a wall 2 feet 6 inches in thickness. It was doubtless one of the chambers, and probably communicated with the corridor adjoining. The size of it is 13 feet by 8 feet 6 inches. The entrance to the courtyard was at D. E was probably the atrium or courtyard open to the sky. It is 68 feet in length, by 20 in breadth. It was paved throughout with small red tesseræ, portions of which remain, as shown on the plan, in the N.E. angle, and on the north and south sides. The pavement is laid in this fashion: there is first a layer of small blocks of rough sandstone; over this lies a coat of chalk; upon which, bedded in cement, the tesseræ rest. F and G, to the north and south of the court, were in all probability the corridors, roofed in, and divided from it possibly by columns. They do not exactly correspond in size, that at F being 6 feet in width, that at G 8 feet. It will be observed that on both sides the separating wall terminates about 20 feet from the end of the courtyard: this wall is in each case 3 feet in thickness.

H and I appear to have been two of the principal rooms; the former is 10 feet square, the latter 11 feet 6 inches by 9 feet. The walls of both these chambers are very strongly built of flint, with a bonding-course of flat tiles at the ground-level, and three or four courses at the angles. The room H had been painted in red stucco. K is a chamber very irregular in shape. Whether it was originally all in one, or was divided about the centre, it is not easy to say, although there is some appearance of a partition-wall. At the northern end is a projection 5 feet in length by 6 wide. I am inclined to think that this chamber was the kitchen, and that the projection was where the stove or furnace was placed. This opinion is borne out by the fact that in excavating the ground round it, it was found all black and containing pieces of charred wood, and that the flue tiles, which were abundant here, were also much blackened. Larger quantities of pottery were found here also than elsewhere, many of the fragments being doubtless those of jars and other cooking utensils; and in addition to

these there were several bones of animals and oyster-shells. The bones that were found were those of the chicken in great abundance, hare, sheep, ox, deer, and hog. The floor showed remains of flat tile pavement laid in cement; but in this portion of the villa the walls are so close to the surface of the ground, that in some places they have been struck by the plough. It will be observed that between the projection in this chamber and the outer wall of L the wall is interrupted, nor can any foundations of one be traced. It can hardly be supposed that the western side was exposed to the outer air; but it is not easy to say what the arrangement was at this point.

L, M, and N are remarkably small, and it is difficult to conjecture their use, unless they were store-rooms in some way connected with the kitchen. The size of the first is 2 feet 3 inches by 4 feet 8 inches, that of the second 4 feet 8 inches square, and that of the third 5 feet 4 inches by 4 feet 8 inches. Between L and M and M and N is a small space 10 inches in width at bottom and tapering to a point, paved with flat tiles sloping towards room K. This arrangement may have had something to do with the heating by hot air, which, as I shall show presently, I believe was supplied from a furnace at K.

O and P have been generally considered to be the bath. The walls of the former, as will be seen by the view of the building at page 1 descend considerably lower in the ground than those of any other of the chambers, and between the ground and the floor there is a space of about 2 feet in depth. O is separated from P by flat tiles overlying one another, mounting up like steps. Through the centre of these two chambers runs a narrow channel paved with flat tiles, communicating with a drain cut through the solid stone, of which the western side is built. The whole arrangement of the western end of the building deserves careful attention. The termination of P in the interior seems to have been semicircular, or rather apsidal in form, the outer wall running straight. It is composed entirely of very large

blocks of sandstone squared. Upon digging down to ascertain the depth of the foundation, it appeared that these stones rested upon concrete, and in places had flat red tiles beneath them. One of the largest of these stones measured 3 feet in length by 29 inches in width, and was 11 inches through. Perhaps there was here an outer bath or open-air reservoir, paved with tiles; and as many of the stones are wedge-shaped, it would seem that this part of the bath had an arched form. The water had evidently been confined here by some means, for in digging down, it bubbled up like a spring. The fine sunny aspect at this point would make it a favourable position for a bath of the kind suggested.

Q is the last chamber which remains to be mentioned; it is 12 feet by 9. The outer walls, as will be observed, are much thinner than those of the rest of the building, being only 15 inches. Between it and H there is a passage 18 inches in width paved with flat tiles, up which the hot air probably was passed. This room is somewhat distinct from the other chambers, and it appears to me that it was connected with the bath. From its position and the difference in the character of the masonry, I suspect it was an addition to the original building.

Before proceeding to give a description of the plates, it remains to say a word on the absence of any hypocaust, the almost universal feature in every Roman building. It seems to me clear that there never was one—that is to say, not in the proper sense of the term as a substructure. Had there been, notwithstanding the damage that the building has sustained, some traces of it must have remained. The nature of the situation would account for this absence. The villa is so low and so close to the stream, that at about 2 feet below the surface of the ground you come upon standing water. The pavement which remains *in situ* enables us to ascertain exactly the ground-level. These facts convince me that the heat was supplied from a furnace probably at K, which is about 8 inches below the ground-level of the walls, and carried through flue-tiles im-

mediately beneath the floor. Abundance of flue-tiles, well charred and blackened, have been found; but from their position so near the surface, they were mostly broken and disturbed.

The following plates are from drawings made for me by Mr. Herbert Smith, of 49, Coleshill Street. They are exceedingly accurate representations, and I am indebted to him for much useful information rendered me during the progress of this paper.

Plate I.—This Plate consists almost entirely of iron objects.

Fig. i. is imperfect, and it is not easy to determine its use; but it was probably some part of a fastening.

Fig. ii. are two examples of keys.

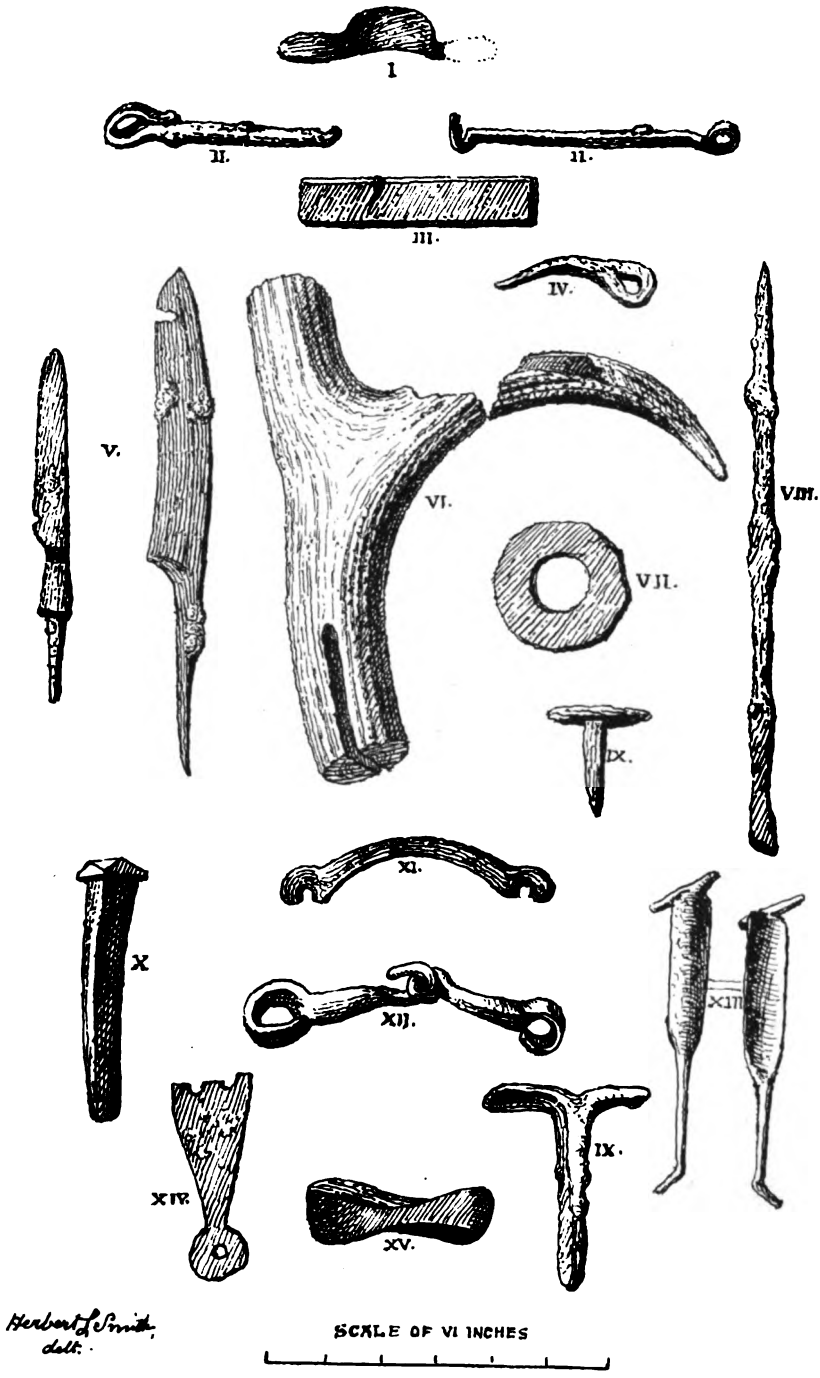
Fig. iii. is of lead. It was possibly a portion of a knife-handle, part of which has been broken off. A fragment very similar in shape, but formed of bone and with a circular hole drilled through it, was found, but has not been figured. One or two other pieces of lead have also been dug up.

Fig. iv. is probably a staple of some kind.

Figs. v. are two knives, late Roman in character. The larger of the two is curiously formed. The stout back and spur next to the handle are like a modern scythe, while the rest of the blade being thin, renders it capable of sustaining a keener edge. The smaller one was found among fragments of Roman pottery, tiles, &c., in levelling a mound at some distance from the villa. It is very similar in form and size to one found at Caerleon, and figured at Plate XXXV., No. 17, of the "Isca Silurum."[1]

Fig. vi. is part of a stag's horn. A groove has been cut down the centre with a saw, or some instrument of the kind, the marks of which are visible in the inside, and also at the top, where it has been cut off straight.

[1] *Isca Silurum, or an Illustrated Catalogue of the Museum of Antiquities at Caerleon*, by John Edward Lee, F.S.A. This work contains a most interesting account of the excavations at Caerleon, and has numerous illustrations of the objects found there.



Into this groove a blade was probably fitted, though it is not easy to see how it was fastened. A portion of the lower part of the horn, where it would have been held in the hand, has been broken off; but the supposed shape of it when perfect is given in the drawing. It was found in excavating at D. I imagine it to have been a hunting-knife.

Fig. vii. is a portion of a bolt, technically, I believe, called the "washer."

Fig. viii. is a long straight piece of iron 10 inches in length. Part of the top, which seems to have been curved, has been broken off. It was probably a flesh-fork, or something of the kind, for taking meat out of the pot.

Figs. ix. appear to have been two hooks or nails. The larger one is very similar to one figured at Plate XXXVI., No. 4, of the "Isca Silurum"; the smaller one at No. 10 on the same plate.

Fig. x. is a very large example of a nail, selected out of a great number that have been found. It is 4½ inches in length and weighs 6 ounces and a half.

Fig. xi. is the handle of some small vessel.

Fig. xii. is a bit, in two pieces, fastening into one another in the centre. It will be observed that the outer ring on the one side is considerably larger than that on the other. The bit is very small, and could only have fitted a mule or some small animal.

Fig. xiii. shows a good deal of design. It is curved and hollowed out in the centre. It probably fitted on to a piece of wood, but I have not been able to find any example similar to it, and am unable to offer any suggestion as to its use.

Fig. xiv. appears to have been part of a hinge.

Fig. xv. is interesting. It is a whetstone of sandstone 3 inches in length, well worn on both sides.

Plate II. represents various specimens of pottery.

Fig. i. is a fragment of an open pan, the inside of which has had a black glaze to the depth of about 2½ inches from the top. When perfect, it would have been

of a conical shape, about 10 inches in diameter by 4 or 5 inches in depth. It is of that kind known as the Upchurch pottery, made in the marshes a little above Sheerness. It is of a fine hard texture and of the prevailing blue-black colour. A very large quantity of the same character has been found.

Fig. ii. is the rim of a much smaller vessel. When perfect, it would have been about 6 inches in diameter by 4 or 5 in depth. At about 2 inches below the rim is a sort of diamond pattern. The colour of it is peculiar, the red showing beneath the black glaze.

Figs. iii. are two fragments of very rude pottery of a pale red colour imperfectly baked, placed in their supposed connection to one another. The side of the vessel is ornamented with a diamond pattern very roughly executed, and with no attempt at regularity in the design. They have more the character of British pottery than of Roman.

Fig. iv. is of a coarse ware very imperfectly baked. It is ornamented inside with circular bands intersected by a diamond pattern, and is, I think, a specimen of the Pottery made in the neighbourhood.

Fig. v. is of a hard ware, and of a bluish-grey colour. It is the fragment of a flat-bottomed vessel. It is interesting from having on it some Roman writing. The letters, which I read as BVSP, are very roughly cut, and are probably only part of a longer inscription, indicative possibly of the name of the maker or owner of the vessel. It has a cross cut transversely on the face of it. At Plate XXIV., Fig. iii. of the "Isca Silurum," is a representation of the bottom of a bowl of Samian ware, on which is scratched INGENVI, which the author of that work considers to have been the owner's name.[1]

Figs. vi. vii. viii. and ix. are given as specimens of ornamented pottery. The three last are of very fine texture and elegant design; they belong probably to the

Isca Silurum, p. 46.

Herbert L. Smith, del:

F. Netherclift, lith:

Scale of 6 In.

class of Castor pottery.[1] The fragments that remain of them are unfortunately very small.

Fig. x. is of a dull red ware very imperfectly baked, ornamented with a succession of small dots made by a pin's head, or some instrument of that sort, impressed on the clay when soft. There is little doubt that this is an example of British pottery.

Figs. xi. are four fragments, all similar in design, a small raised moulding running all around them.

Fig. xii. This is by far the most ornamental piece of pottery that has been discovered during the excavations. It is a fragment of Durobrivian, or Castor pottery, of fine quality, and of the ordinary bluish or slate colour. The subject, as is so common in specimens of this pottery, is a hunting scene representing stags in relief, executed with considerable skill.

Figs. xiii. are three specimens of light grey ware ornamented with a scroll pattern.

Fig. xiv. is also of grey ware. It is ornamented with a circular band, from which at intervals a succession of lines is drawn to the bottom of the vessel.

Fig. xv. is of an inferior kind of red ware, ornamented with notchings.

Fig. xvi. is a fragment of the rim of a very large vessel of light grey ware. The rim is more than an inch in thickness, and there is sufficient to show that the vessel bulged out very considerably in the centre.

Fig. xvii. is a fragment of a rim of coarse red ware, of that inferior description of Samian pottery, which is supposed by some persons to have been made in Britain, although upon this point there is considerable difference of opinion.[2]

Fig. xviii. is part of a bowl of local ware of a grey colour.

[1] For an account of this pottery see Wright, *The Celt, the Roman, and the Saxon*, p. 214.

[2] See *The Celt, the Roman, and the Saxon*, pp. 220, 221; and *Isca Silurum*, p. 27.

Fig. xix. is the handle of a vessel possibly of Upchurch ware of a dark slate-colour.

Fig. xx. is a perfect rim of a slate-coloured vessel; it is rather more than 5 inches in diameter.

Figs. xxi. are three portions probably of the same vessel; the bottom, the neck, and a fragment of the handle of an amphora. The marks of the turning-lathe on the inside are very distinct.

Figs. xxii. are both fragments of colanders or strainers. There is no perfect example of this kind of vessel in the British Museum; but I am informed by A. W. Franks, Esq., F.S.A., that a perfect one has lately been found among some Anglo-Saxon remains at Chertsey, in this County.

Fig. xxiii. is the bottom of a bowl of brown ware. The outer side represents an example of those peculiar markings which at first sight seem to have been made in an eccentric lathe, but which are supposed to have been made in a common lathe by means of a tool which is very little known.[1]

Fig. xxiv. is of a blue-grey colour, and when perfect must have been a vessel of very considerable size. It is ornamented with a singularly bold scroll pattern.

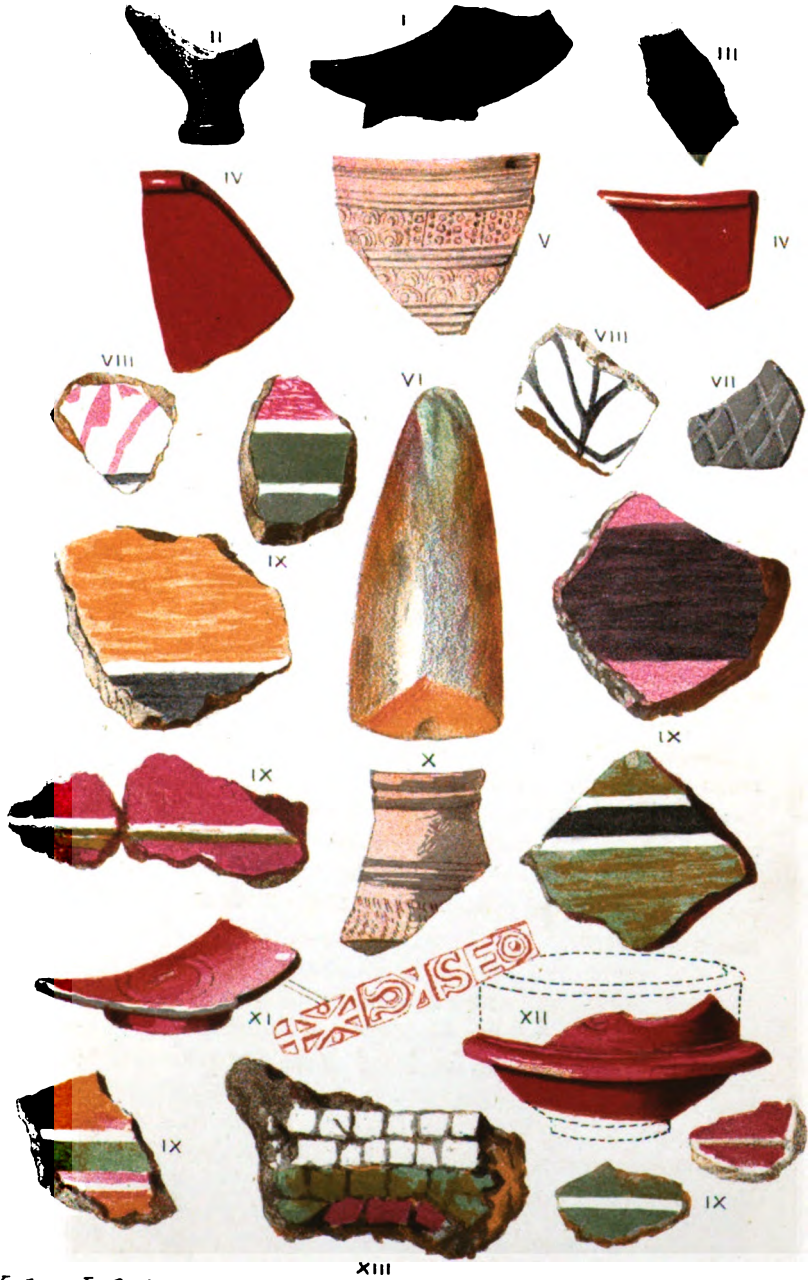
Fig. xxv. is part of the bottom and side of a narrow amphora of light colour.

Fig. xxvi. is part of the side of a bowl of slate-coloured ware. The fragment above has a deep rib-moulding, and was probably part of the operculum of the same vessel. They are placed in their probable relation to one another.

Plate III. represents specimens of Samian ware, pottery of finer texture, and wall-paintings.

Fig. i. is a portion of a flat bowl, or patera of a pale, red colour, an imitation of Samian ware such as is supposed by some to have been manufactured in England. It is very inferior in quality to Figs. iv. and xi., which are of undoubted Samian ware.

[1] For an account of this, see *Isca Silurum*, p. 46, and Plate XXIV.



Herbert L. Smith, del:

F. Netherclift, lith:

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Fig. ii. is somewhat similar to Fig. i., though of a finer ware. It is the bottom of an amphora.

Fig. iii. is a fragment of very fine ware of a brownish colour, probably Castor pottery.

Figs. iv. are two fragments of the rims of bowls of Samian ware of the usual deep red colour.

Fig. v. is part of a bowl very prettily ornamented, of a pale brick-dust colour, an imitation again of Samian ware.

Fig. vi. is a flint implement of the chisel type, very perfect in form, polished, and sharp at the broad end. It measures rather more than 6 inches in length, is nearly $1\frac{1}{2}$ inch thick, and $2\frac{3}{4}$ in breadth, and weighs 16 ounces. It is figured here because it was found close by the villa, in grubbing down an old bank and hedge. Its occurrence there may have been purely accidental, and cannot be made use of to establish any theory; but, taken in conjunction with the fact that numerous flint flakes, worked bones, and fragments of pottery probably British, have been found on and close by the site of the Roman villa, it may be considered as one among other evidences of a very early habitation at this spot.[1]

Fig. vii. is a fragment of Castor pottery of a pale grey colour, ornamented with a diaper pattern.

Figs. viii. are two specimens of wall-painting in distemper; they are distinguished from those that follow by having a pattern on them.

Figs. ix. are various specimens of the same; the prevailing colours are red, yellow, and green, with stripes occasionally of black and white. It is remarkable how the colours have preserved their freshness.

Fig. x. is a fragment of a bowl of a pale red colour. The ornamentation is peculiar and very delicate.

Fig. xi. is the bottom of a bowl of Samian ware. It has the name of the potter stamped in a label in the

[1] Since writing the above, there has been found not far from the same spot a stone hammer of a very early type. It is of sandstone, and measures $5\frac{1}{8}$ inches in length, is $1\frac{3}{4}$ inches thick, and $3\frac{1}{2}$ in breadth. The hole in the centre is very perfectly drilled. A woodcut of it will be found at page 24.

inside, as appears in the drawing. The letters SE can be easily distinguished. They may stand for "Secundi" or "Severi," both names of potters of frequent occurrence. Most of the potters' marks are known, but I have not found any example exactly like this.[1]

Fig. xii. is portion of the side of a vessel of Samian ware of rather an uncommon shape, of which examples are to be seen in the British Museum. It is of thicker and coarser material than the other specimens.

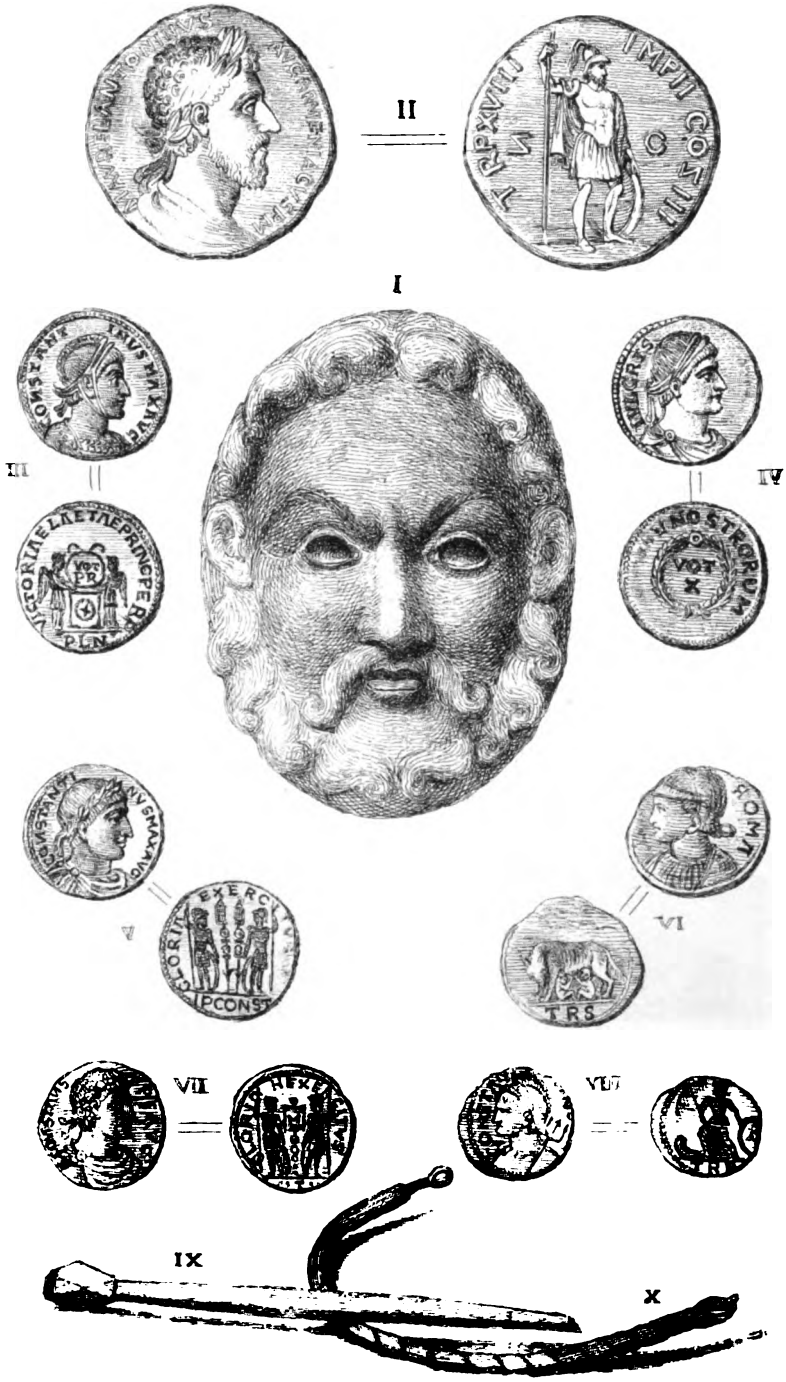
Fig. xiii. is a fragment of a pattern of mosaic pavement, the only piece that was found, all the rest of the tesselated pavement being the common red brick cubes. It was found, to the best of my recollection, in chamber B. It has formed part of a pattern of which the white was probably the outside border, the green and red, as will be observed, being on the curve. The cubes are remarkably small, and very uneven in size.

Plate IV. is for the most part representations of coins.

Fig. i. is a bronze mask. It was found in 1863 in cutting a drain about 200 yards south of the villa, at a depth of about 3 feet. There is a slight indentation in the forehead (not shown in the drawing), caused by a blow from the pickaxe of the workman; but when first seen by him it was perfect. The lips have at one time apparently been enamelled, and there are indications of there having been beads in the eyes. I exhibited it at the Society of Antiquaries, on 9th June, 1864. They described it as "a bronze mask 2½ inches in height, made of thin metal beaten up in relief, and has been filled with lead, of which traces remain. It represents a bearded face, with moustache not unlike a head of Neptune. Similar objects are in the collection of M. H. Bloxam, Esq., F.S.A., of Rugby." It may have been fixed, I think, on some part of the armour.

Fig. ii. was not found at the villa, but in a hedgerow

[1] For a list of potters' marks on Samian ware, see *The Celt, the Roman, and the Saxon*, App. ii.



Herbert L Smith
Del. et Sculp.

ACTUAL SIZE.

on the Pilgrim's Road, just beyond the village of Titsey, in the year 1850. It is a first brass of Marcus Aurelius Antoninus, distinguished by the epithet of the "Philosopher," born A.D. 121, son-in-law of Antoninus Pius, adopted by him A.D. 138, and his successor A.D. 161, when he took the style of Marcus Aurelius Antoninus. He took the titles of Armeniacus and Parthicus Maximus, after the campaign of A.D. 162-165, against Parthia and Armenia, when the Romans penetrated as far as Babylon, and compelled Vologeses III. to make peace. After the successes in Germany, A.D. 170, the title of Germanicus was substituted for that of Armeniacus. His death took place at Vienna A.D. 180.[1]

Obverse—Head of the Emperor laureated. M. AUREL. ANTONINUS. AUG. ARMENIACUS. PM. (Pontifex Maximus).

Reverse—Warrior with helmet, holding a spear in his right hand, whilst leaning with his left on a round buckler, probably a personification of Mars. TRP. XVIII. IMP. II. COS. III. The letters SC (Senatus Consulta) are in the field. The letters TRP stand for Tribunitiâ potestate), the numerals indicating the date at which the tribunitian power had been conferred. COS. III. indicates the number of consulships. These dates render it probable that this coin was struck between the triumphs of A.D. 166 and the successes in Germany, 170 A.D. The letters SC appear on this as on many other brass coins, implying that that coinage was under the direction and control of the Senate, while that of gold and silver was at the disposal of the Emperor.

Fig. iii. is a small brass of the Emperor Constantine the Great. Born A.D. 274; baptized A.D. 311; sole Emperor A.D. 323; died A.D. 337.

Obverse—Head of the Emperor, galeated. CONSTANTINUS. MAX. AUG.

[1] From information communicated by Albert Way, Esq., F.S.A. October, 1850.

Reverse—Two Victories holding a shield, inscribed VOT. PR. Below, an altar with a cross. VICTORIAE. LAETAE. PRIN. PERP. (Princeps perpetuus). In the exergue[1] P.L.N. (Pecunia Londinensis, or Percussa Londini). The VOT. PR. inscribed on the shield has relation to the solemn feasts celebrated by the Emperors at the end of every ten years, as for a renewal or continuation of the sovereignty in their persons. On these occasions the "numi votorum" were struck by them, and were designed to indicate both the discharge and the repetition of their votive engagements. The vota prima would be those taken at the end of the first ten years.[2]

Fig. iv. Small brass.

Obverse—Head of the Emperor laureated. JUL. CRIS. (Julii Cæsaris).

Reverse—Inscribed within a wreath VOT. X (Votis decennalibus) . . . . . NOSTRORUM. There are some letters before this word, but they are illegible.

Fig. v. Small brass of Constantine the Great.

Obverse—Head of the Emperor laureated. CONSTANTINUS. MAX. AUG.

Reverse—Two soldiers with helmets, holding a spear in their left hand and leaning on a round buckler with their right. Between them two standards fixed upright. GLORIA. EXERC . . . . In the exergue P. CONST. (percussa Constantinopoli). The seat of empire was removed to Constantinople A.D. 330, and the death of the Emperor occurred A.D. 337, which will fix the date of this coin between those two periods.

Fig. vi. A small brass of the time of Constantine.

Obverse—A galeated head, URBS. ROMA.

Reverse — Romulus and Remus with the wolf. In the exergue, TR S. (Treviris signata, coined at Treves).

Fig. vii. Small brass of Constans, son of Constantinus

[1] The exergue of a coin is the space below the line on which the figures of the reverse are placed.—Akerman's *Numismatic Manual*, p. 161.

[2] Akerman's *Numismatic Manual*, pp. 160, 161.

Maximus and Fausta. Born cir. A.D. 320, Emperor A.D. 337, killed A.D. 350.

Obverse—Head of the Emperor laureated, CONSTANS. DD! AUG. The letters immediately following Constans are not clear: they may be PP. or DD. Constans assumed the name of Augustus A.D. 337.

Reverse—Two soldiers with helmet, spear, and buckler; between them a labarum inscribed M. GLORIA. REX. or HEX. In the exergue are some letters nearly effaced, apparently TRP.

Fig. viii. Small brass of Constantine.

Obverse—Head of the Emperor, with helmet and spear. CONSTANTINUS.

Reverse—A figure, apparently in a galley. In the exergue, TRP. (Treviris percussa).

All these coins, with the exception of No. II., were found at the villa during the excavations; besides them, I have in my possession a small brass of Tetricus found at Tatsfield, and also a middle brass, very much defaced, having on the obverse the head of an emperor, and on the reverse a figure, apparently of Mars, inscription obliterated. The latter was found in ploughing a field adjoining the Pilgrim's Road, in the parish of Tatsfield.

Fig. ix. is a bone or ivory pin about 2½ inches in length, bulging out slightly in the centre, the point being broken off. It was found at the villa.

Fig. x. is a portion of an armilla or bracelet of green colour, made of bronze wire twisted and hammered flat. The hook at one end remains perfect.

Besides the objects represented in these plates, I have a very large collection of broken pottery. I have over three hundred examples of the rims of vessels, all differing either in colour, material, or form; to which must be added numerous specimens of the bottoms of vessels which do not correspond in any way with the rims. The quantities of pottery found on all Roman sites is worthy of remark, and justifies the remark of Mr. Wright, that this article formed a large proportion of the furniture of a Roman house, and was used for a much greater variety

of purposes than at the present day.[1] I have also several fragments of glass. Two of them are of thick glass of a bluish-green colour, one having the reeded moulding so common on the handles of Roman glass vessels. Two others are of a yellowish-green colour. Four are of white glass of finer texture, one being the fragment of a rim, the other the fragment of a bottom either of a drinking-cup, or of a vessel popularly termed a lachrymatory. One is of a mixed colour, green and blue. There are three other small pieces as delicate and fine as any Venetian glass; one of them has a moulding on it something like that generally known as the pillar moulding, an ornament by no means uncommon on Roman glass. Besides these, I have a large quantity of molten glass, destroyed evidently by the action of fire, and reduced to shapeless lumps. To these may be added abundance of nails, flat tiles with a hole drilled in the centre and ornamented with a sort of rib-moulding, flanged tiles, fragments of cornice mouldings of concrete, large numbers of bones and teeth of animals, several oyster-shells, and shells of a large species of snail, both of which are so commonly found on Roman sites.[2] I have also a fragment of a millstone. It is of sandstone, circular, with a hole drilled in the centre.

There is sufficient evidence, I think, to warrant the conclusion, that the villa was destroyed by fire. Some of the stones in the walls, the tiles, and the greater part of the pottery, have the appearance of having been subjected to the action of fire, and one or two pieces of charred wood have been found among the ruins.

I cannot conclude this paper without expressing my thanks to W. W. Pocock, Esq., for the interest which he took in the result of the excavations, and for the paper which he read to the members of our society at their meeting in 1865. I would willingly have left the subject in his hands had it not been that I am disposed to differ from him somewhat in the opinions he expressed; and

[1] *The Celt, the Roman, and the Saxon*, pp. 228, 229.
[2] Ibid. p. 344.

from living on the spot and giving some attention to the subject, I have advantages which he did not possess, and have ascertained thereby facts which, had they been known to him would no doubt have led him to arrive at a different conclusion.

It will be remembered that Mr. Pocock was of opinion that the whole building, with the exception of perhaps one or two chambers, was a bath with its various accessories,—sudarium, tepidarium, frigidarium, &c., being attached to a larger villa, which would probably be found immediately to the north or south of it. It has been a common mistake, I think, in describing Roman villas, to treat the greater part of the house as a bath; and in this case to do so is, to my mind, a mistake. If the view that I have taken in describing the several chambers is correct, it will be seen that the house, though small, was tolerably complete, and possessed most of the requirements of a Roman dwelling; and with regard to there being any other building close by, the whole of the land for some distance round has been underdrained, and with the single exception of one long wall running for some distance about 80 yards to the south of it, no traces of a Roman building have been found. It was ascertained, however, that there were no cross walls running out of it: it was undoubtedly Roman, and may have been an outer or inclosure wall. The walls of the villa have been tested all round, and prove that the whole of the building has been excavated. I am not prepared to say that fresh discoveries may not some day be made; but as far as the immediate vicinity of the villa is concerned, did any other Roman buildings exist, they must ere this have been discovered. These are my reasons (*valeant quantum*) for differing from the opinions expressed by Mr. Pocock; and another argument may, I think, be found in the quantities of pottery and vessels of domestic use, which would not have occurred in such abundance had the building been merely a bath.

It appears as if the débris of the building, which in a dwelling of this size would be considerable, had been carried to various places, sometimes to a considerable

distance. In levelling the bay of an old fishpond close by the site, in the winter of 1866, we found that the whole bank behind the puddling of clay consisted of rubbish, mortar, Roman bricks, tiles, fragments of pottery, &c. The bay of another pond, which at one time covered about an acre and a half of ground, was levelled down the year before; and this pond I believe to have been made by the Romans. The bay in this case was composed entirely of clay, and the dam had been secured by blocks of wood, which had almost entirely perished; but the nails which had been driven into them remained, and were exactly similar to those found at the villa. There were a few Roman tiles, and here and there a fragment of pottery, not lying in heaps, as in the former case, but such as might have been used by workmen during the progress of the work and cast aside as broken. During the past winter, while moving some ground just outside the garden, we came upon a quantity of Roman pottery, wall-paintings, tiles, tesseræ, &c., which had evidently been shot there in a heap. Among them were some curious mouldings in stucco, which had apparently been part of the decorations of a room. Scarcely a year passes without my adding to my collection of Roman antiquities, and there is certainly a field for further exploration in the neighbourhood.[1]

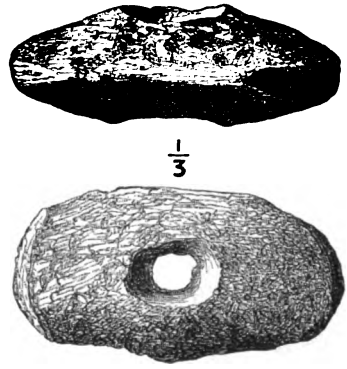
1. This remark has been verified since it was made, by the discovery of large quantities of Roman pottery on Limpsfield Common; and although the investigation that has been made is as yet incomplete, I append this note to give an account of the result of it as far as it has gone. It is evident that the Romans had in the district a manufacture of pottery of considerable extent; the heaps that have been found consist of the refuse from the kilns, and judging from the large quantity of it, these kilns must have been in use for a number of years. The first heap that we explored was on a part of Limpsfield Common called "Watts Hill," and close by the old track mentioned before as Lake Street. This heap was about 6 feet long and 4 feet wide, and overgrown with bushes and brambles. The pottery was of a grey colour and coarse material, and consisted for the most part of handles and rims of vessels of a very large size. It appears to have been burnt much in the same way as charcoal is burnt now. About two feet below the surface we found a quantity of wood ashes, but there was no

all the pottery was reduced

Since I commenced this paper I have been in communication with some of the officers of the Ordnance Survey, and I am happy to find, that, under the direction of Capt. the Hon. W. Trench, who is himself, as I am informed, much interested in antiquarian researches, the sites of British and Roman camps and tumuli will be noted in the Ordnance Map, and an attempt made to trace out as accurately as possible the lines of Roman roads. This will render unnecessary the plan which I suggested at the outset of my paper, and may lead, I

appearance of any kiln. In a field close by, called "Loam Pit Field," there is a bank which runs for twenty or thirty yards, consisting entirely of broken pottery lying close to the surface. It appears to be of the same character as the former; but this heap has not yet been explored. I suspect that the clay for this pottery was dug from a pit in the wood adjoining; it is of a light loamy character. The third heap was on a part of the common called "Cearn Bank," near the earthwork which I mentioned before. This is a very large heap, and at this spot are the remains of a kiln. It is built of rough stones laid without mortar, very much in the shape of an oven. The opening is about one foot in width by 2 feet 6 inches in height, the whole being about 3 feet in diameter. On one side of it is a trough-shaped hole about 6 feet in length: in this were several pieces of charred wood and wood ashes, and in it we found the largest and most perfect pieces of pottery. They are very much the same in character as those found at the other place, and exhibit the same markings; but, being made of a different clay, are lighter in colour. The markings on the handles are mostly round holes, sometimes pierced through, or else lines cut deeply on the face of them. The mouths of the vessels have this peculiarity, that they are all bent to one side, no doubt for the purpose of pouring liquid out of them. A few pieces have wavy lines on them, but for the most part they are quite plain and devoid of ornament. The clay for this pottery probably came from the face of the hill or from the weald below. It is difficult to say what should have led to the establishment of these potteries, unless it was the abundance of wood. The clay is of an inferior quality; and this may partly account for the large quantity of refuse, much of it doubtless not standing the fire. As yet we have found nothing whole, nor come upon any of the workmen's tools. On comparing some of this pottery with that found at the villa, I have little doubt but that it is the same, and that the greater part of the common ware was made in the neighbourhood. It would be curious to observe whether that found at Keston or on other Roman sites in the neighbourhood was of the same quality and exhibited the same markings. I hope as soon as possible to pursue the investigation further, and to have something more to report in our next volume.

hope, to some interesting discoveries with regard to the Roman occupation of the country. The traces of a people who have exercised so great an influence on the civilization of the world, and whose works are to this day the wonder and admiration of mankind, deserve, even where they exist in a rude and humble character, minute and careful investigation.



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WYMAN AND SONS, PRINTERS, GREAT QUEEN STREET, LONDON, W.C.

[*Reprinted from the Journal of the Anthropological Institute, November*, 1880.]

FURTHER NOTES *on the* ROMANO-BRITISH CEMETERY *at* SEAFORD, SUSSEX.* By F. G. HILTON PRICE, F.G.S., and JOHN E. PRICE, F.S.A.

HAVING been fortunate in obtaining a renewal of the kind permission to excavate on the Sutton Downs granted us by Mrs. Harison, of Sutton Place, and the Rev. John Harison, of North Sutton, in June, 1876, we continued the explorations for a few days during the summer of last year.

In our first notice† we erroneously supposed that this particular portion of the Downs in which we found the cemetery was called the "Warren," from the fact of its being a place swarming with rabbits, but we have since ascertained that the Warren properly so called is further to the westward, and that the spot in which we excavated is known as the Little Bury. In the published description of the cuttings made, we ascribed numbers to each, ranging from 1 to 7, and as the present communication is intended as a continuation of the previous paper we think it desirable to continue the numbering for these cuttings.

On 26th May, with three men, we commenced digging, between numbers 6 and 5, working westwards towards No. 4 on our section; this fresh trench is numbered No. 8. The trench was cut to a depth of about 6 feet; in some places where the hard sandy rock was met with at a less depth we did not pierce below it, thus in many parts we did not exceed a depth of 5 feet.

At from 4 feet to 4 feet 6 inches several black patches were observed in which fragments of burnt pottery, flints, pieces of

* In a map preserved in the British Museum relating to a survey of the Sussex Coast in the reign of Queen Elizabeth, made by Sir Thomas Palmer and others, the site of the Roman Camp on Seaford Heights is described as "Burdyck Hill," and it shows two beacons thereon. It is also known as Castle Hill and Signal Station.

† "Journal Anthropological Institute," vol. vi, p. 301.

charred bones and bits of charcoal were found; most of these patches contained one or more iron nails. Some of these black deposits were placed upon a quantity of stones and flints, all bearing marks of fire. As previously suggested, these black spots in the sand probably mark the place where interments have been made. After the body was burnt on the funeral pyre, the ashes were collected and placed in a cloth or in a napkin, and fastened together with the iron nails; these were doubtless instances of where the people cremated were of a poor class, probably soldiers or slaves whose friends were not in a position to afford the expense or luxury of a funeral urn.

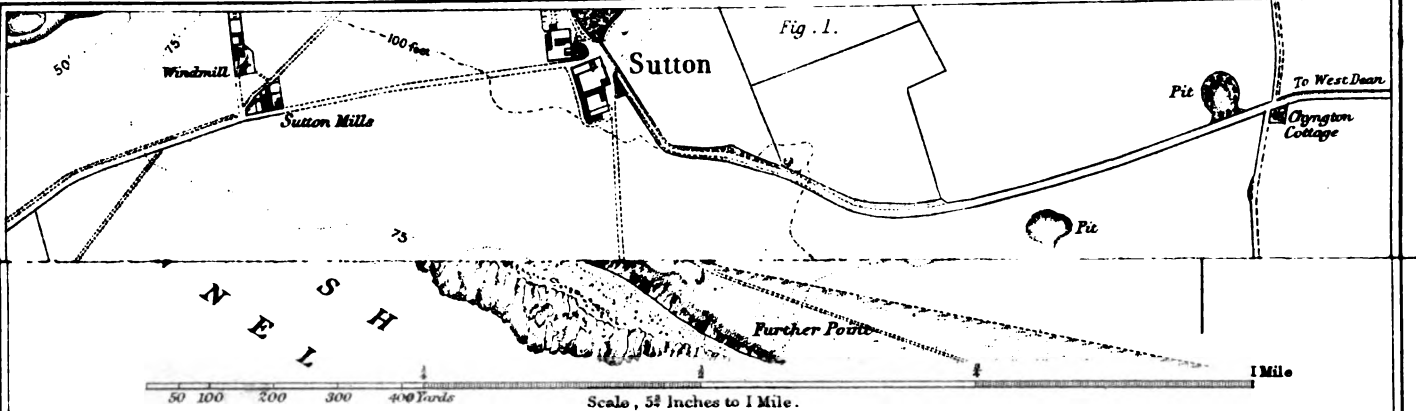
The custom of entombing such vessels with the remains of the deceased was practised by other nations besides the Romans; for example, among certain Indian tribes, the Moldavians, Caubees, etc., and modern history tells us of the custom among the Chinese and Peruvians.*

It often happened that in out-of-the-way settlements, that is to say, stations far removed from a city or town, that the Romans made use of domestic pottery for funeral use. Among sepulchral vessels found in a ustrinum at Littington, near Royston,† was a small bottle of green glass; it had contained the ashes of a child, but a fragment of bone had evidently been too large for the bottle, so a portion had been chipped off to allow of its insertion; the broken piece had been afterwards replaced to close the aperture. If the vessel had originally been intended for the purpose, one sufficiently large would have been selected. At Colchester, in 1844, an amphora was discovered broken at the neck and handles. It contained a lachrymatory and lamp, a cinerary urn, and a coin of Faustina, with other objects, and the upper portion had been clearly reinstated by the depositors after the contents had been incased, and at times they were purposely broken for such use. Occasionally broken urns, perhaps second-hand ones, and mended urns—were used, as was proved at this very cemetery the last time we had the pleasure of describing the results of our digging.

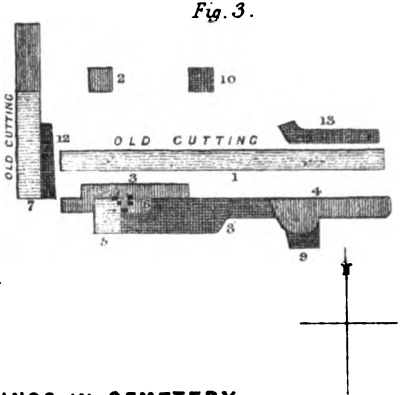
In this same trench a neolithic celt was found (*see* Pl. XI, fig. 5), fragments of pottery, red tiles, and bits of brick. A little further on, at a depth of 4 feet from the surface, a large patch of blackened earth, mixed with charcoal, flint flakes, and upwards of 90 iron nails and studs, mixed with fragments of charred bones was met with. This is quite an exceptional case meeting with such a large quantity of nails in one interment; it is a common occurrence to meet with two or three together, but

* *Vide* Nicolo de Coti on the Habits of the Indian Tribes, Belleforest's "Cosmography," vol. ii, book iii, ch. 29.

† "Archæologia," vol. xxvi, p. 371.



SECTION IN CEMETERY.



Reference.

1. Trench first opened.
2. Dug to 6 feet nothing found.
3. Three Urns.
4. Black plateau fragments of Pottery, Scrapers.
5. Several black patches.
6. Three Urns.
7. Nothing found.
8 & 9. Black plateau Flints, Stones & Pottery.
10 & 11. Flint flakes, Pottery, &c.
12. Bone ashes, Charcoal, Nails, &c.
13. Burnt bones, Flints & Pottery.

PLAN OF CUTTINGS IN CEMETERY.

J.P. & W.R. EMSLIE, LITH.

SEAFORD, SUSSEX.

in this find some were large and others quite small, apparently suggesting that the remains of the ashes after the burning were gathered together and deposited in a small wooden chest or box, ornamented with the small nails, the wood of which has long since decayed; no personal ornament or coins were found with it.

Continuing this trench towards the old cutting No. 4, we came upon the same black seam of earth, clay, flints, stones, and pottery mentioned by us in our former paper (*see* page 306, "Journal Anthropological Institute," vol. vi); this same seam was likewise met with upon the same horizon, *i.e.*, at a depth of 4 ft. 6 in. from the surface, at the cutting marked No. 9 on the plan. This circumstance proves that the place occupied by the funeral pyre was of considerable extent, and was probably the *Bustum* or *Ustrinum* of the settlement. Another round flint ball was found here.

In this same cutting on the third day we continued excavating, and soon came upon some lumps of chalk rubble in the sand. As this was an unusual circumstance, great care was observed in removing the earth; in the midst of these pieces of chalk, a brownish-black vase, 5½ inches high, of a superior texture of Upchurch pottery was met with. It was ornamented with oblique markings, inclosed within incised concentric lines, and 1½ inches from the rim is a raised band encircling the vase above the shoulders. Next to it, on the left, was a black patera, 7 inches in diameter, which was unfortunately very much broken, but sufficient was recovered to put together and show its size and shape. The patera, it will be seen, is of a coarser texture than the vase, which is really fine and of elegant shape (*see* fig. 6); with the exception of the two flint flakes, nothing else was found near it. These vessels must have been placed in the position in which they were discovered as an accompaniment to an urn, which we failed to find; but the ground immediately to the north of this was part of the trench cut in 1825 by Mr. Harison, and the remainder of the interment was probably discovered at that time.

Having now completed the section 6 to 4, it was filled in, and two men were detached to sink trial shafts at the spots marked 10 and 11; but nothing, with the exception of flint flakes and fragments of pottery, were met with, and these were in the top layer of earth.

Another section was cut on the little mound to the south of the Little Bury, but nothing was discovered.

On the 29th May four men were occupied in cutting a trench 12 feet long and 5 feet deep by about 6 feet broad, north and south, at the place marked 12 on the plan; as in 1825 a large

number of urns and coins were met with in the old cutting, which was alongside of it—and which we hoped might be found as fruitful; nothing was, however, met with, with the exception of one black patch, containing bone ashes, bits of charcoal, nails, and fragments of pottery; in the soil thrown out flint flakes and bits of pottery were numerous.

We likewise opened a supposed tumulus upon that portion of the Downs known as the Gore,* just above Green Street, and to the east of the old cottage, and made some trenches near it; but, with the exception of fragments of Roman pottery and flint flakes, we found nothing.

What is the origin of the term "Gore" for this portion of the Downs? Was it a triangular holding, and the name conferred upon it in Saxon times, or was it the site of a battle, and so named from the fact of much blood having been spilled there? Halliwell gives the meaning of it as the lowest part in a tract of country, or a small narrow slip of ground

Quite late in the afternoon of the 29th May, whilst the men were engaged filling in the old trenches, we cast about for another suitable place to make an excavation, finding some raised ground a little north of that part of the Downs marked "The Burrows" on the map, which is situated 194 feet due west of the pond, and 114 feet south of the sand-hole. Observing a rabbit-hole in this raised ground, in the mouth of which a few fragments of pottery had been scratched out by rabbits, induced us to dig out a few spadesful of earth; by so doing, we were agreeably surprised by discovering an urn of black pottery, through one side and bottom of which the rabbits had actually forced their way: this contained fragments of charred human bones. It consisted of black pottery, and was 9 inches high; owing to its condition we were precluded from taking any other measurements. Just below the rim was a narrow band of ornamentation, consisting of oblique incised lines unevenly cut, apparently done with a blunt instrument; in parts other incised lines cut the former, forming a sort of cross pattern. Between the shoulder and the base was a large incised trellis pattern. Close beside it was another of reddish brown ware, but too much broken to be of any use The next day (30th May) five men were put upon this digging—the turf was removed and we commenced making a long trench at a depth of 2 feet 4 inches; about the centre of the elevation a fine urn was found. It is composed of reddish brown pottery—7 inches high by 29½ inches in the widest part, and 17 inches round the base. It was full of

* So described on a map of the Sutton estate, by Thomas Marchant, 1772, measuring 20 acres 3 roods 6 perches, and belonging to Launcelot Harison, Esq.

SEAFORD, SUSSEX.

human bones, fragments of charcoal, and a flint flake. This urn is ornamented round the widest part with an incised trellis pattern, and upon the bottom is an incised cross. It is quite perfect (*see* fig. 7). A little to the right of this, at only 1 foot from the surface, a small urn of black pottery was discovered, which fell to pieces on getting it out. This we repaired. It is 4½ inches high by 22 inches in circumference in its widest part—12 inches round the base. Beneath the rim are two deep concentric lines, between which it is ornamented by three lines slanting obliquely to the left, resting at the apex of the third line against three other lines slanting in a like manner towards the right. This urn contained a small quantity of fragments of charred bones very much decayed.

Immediately behind this last described urn, in a position due north and south, at a depth of 2½ feet from the surface, we found a portion of the rim of a Samian ware vessel; the spades were now laid aside, and with a strong knife the earth was cut away in the place where this fragment was met with, and revealed a fine Samian cup, measuring 5½ inches in diameter, 2½ inches high, with a rosette at the bottom. On developing the form before attempting to remove it from the ground, we found directly below it a rim of an urn projecting from the side of the trench; following this down with the aid of the knife, we discovered that this Samian vessel formed a sort of lid to a large brownish-red earthenware urn (*see* fig. 4).

This urn measures 12 inches high, 34 inches round the widest part, and 19 inches round the base; it is ornamented on the shoulder with a band 2 inches in width, between two deep incised lines, in which are cross markings representing trellis work; before this band is another, 1½ inches deep, just below the brim, ornamented with occasional lines.

Before we could remove it from the earth the ground all around it had to be carefully cut away. On making room on the left-hand side close beside this urn, a small drinking cup 4 inches high, of the pottery known as Durobrivian ware, was taken out quite perfect; it is of a brown metallic glaze with eight indented or pinched-in compartments; it is otherwise embellished with two concentric lines with stamped markings passing through the compartments. These stamped markings are such as would now be produced by pressing the milled edge of a half-crown round an earthenware vessel before it was fired (*see* fig. 1).

In making similar preparations for removing the earth on the right-hand side of the urn, a small globular-formed bottle (fig. 3), 3 inches high by 12, without handle, of a coarse brown, thick pottery, which pottery is full of pieces of flint grains, was found quite close to the side of the urn; directly behind it was a black

patera 5¼ inches in diameter of Upchurch pottery (fig. 2). Upon the removal of these small vessels we were able to take out the urn, which was intact with the exception of a portion of the rim; it contained a large quantity of charred human bones and flint flakes. Owing to the Samian cup resting upon the top of it, no earth had fallen into it. This was evidently the interment of a person of some rank or importance, judging from the superiority of the vessels found with it. The Samian cup has the initials "V.E." scratched upon the side.

As this was an interesting find, particularly so as all the pieces are perfect, we have given an illustration of the manner in which they were all placed in the grave.

On the 31st May, with five men we continued the excavation in a direction due north and south; it was a remarkable circumstance that in this particular spot all the urns were found lying in that position.

At a depth of 1 foot 6 inches from the surface the fragments of an urn of very fine yellowish red pottery were discovered; there was not sufficient of it collected to repair, but the base of it measured 3½ inches in diameter. At the same level and in close proximity, the base of a coarse brownish urn was met with, this, too, had been too much crushed to do anything with; it measured 16 inches round the base and had a double cross or star incised upon the bottom of it. In close contact to this was another, No. 8, of reddish-brown pottery, bearing marks of having been turned on the lathe; like the two former, the base only can be put together; it was a low open-mouthed vessel, measuring 13 inches round the base and does not bear any marks or ornamentation.

At a depth of 1 foot 2 inches we came upon a red cup of Samian ware with a turn-over rim; it bears indications of having been covered over with red glaze, portions of which still remain underneath (figs. 8 and 9). This patera is not as fine as most Samian pieces, which makes us think it was of provincial manufacture, particularly as it is very unusual for Samian pottery to lose its lustrous glaze. Such ware has, however, before been found in Sussex, and sometimes of a superior character. Among sepulchral remains discovered at Densworth, in the parish of Funtington, and with examples of glass, were pateræ of Samian pottery. Among the coins then found were some which gave a clue to the age of the deposits; for instance, a brass of Hadrian, legible but in bad condition. The presence of such Samian vessels would, apart from numismatic evidence, at once connect these burials with the Roman period. This ware was in universal use, and though the finer descriptions were doubtless imported from manufactories on the continent, there is much

to favour the opinion that it was also fabricated in Britain. Of late years a mould for the production of one of the large embossed bowls has been found at York, bearing a strong resemblance to similar objects discovered in the neighbourhood of the Rhine; the deposits of such ware in the locality known as the Pan Rock, off the coast near Whitstable and Herne Bay, are also indications that potteries once existed there for the manufacture of this lustrous ware, akin to those so well known in connection with the black pottery at Upchurch Marshes. The inside measure is 5½ inches in diameter, in the widest part of the rim it measures 7½ inches in diameter, and is 3 inches high. The outside beneath the turnover rim tapers down to the foot, which is two inches in diameter.

Within a few feet of the latter we discovered a red patera of Samian ware, bearing a lustrous glaze; it was unfortunately broken before removing it from the earth, but we have roughly mended it. It is 7½ inches in diameter and 2¼ inches high; beneath it was a first brass of Faustina the younger, daughter of Pius, and wife of Marcus Aurelius. It was highly satisfactory finding this coin, as by so doing we have an approximate date for the interment, and can positively assert that it was not earlier than quite late in the second century, as Faustina flourished between 161 and 180 A.D.

Immediately above these two Samian vessels was an urn of thin reddish-brown pottery (No. 9), which was unfortunately crushed in the ground, probably owing to its being so near the surface.

Much of it was decomposed from the effects of the moisture. At two inches from the rim it was ornamented with a concentric furrow, beneath which are short vertical cuts, a quarter of an inch in length, made with a blunt tool; one and a-half inches below was another furrow and a similar line of markings. This urn had contained bones, as several fragments of charred bones were met with mixed up with it, likewise a large flat flint flake, and an iron nail.

We continued digging about this place for about a whole day, but as no further indications of an interment were visible, and supposing that we had worked out this spot, we caused the whole to be filled in.

On the 2nd June we recommenced operations in the Little Bury, at the place marked No. 13 on the plan. We dug a trench east and west and discovered several black patches in the sand similar to those found in trenches No. 6 and 8, containing burnt bones, burnt flints, potsherds, flint flakes, and a neolithic celt.

The foregoing researches close for the present our operations

at Seaford. It is probable that much more could be done, but the work accomplished, both as regards the camp and the cemetery outside its ramparts, is sufficient for the purpose. On the range of downs between the valleys of the Ouse and Cuckmere there are many barrows which have been partially examined from time to time. In these, instances of cremation and inhumation occur side by side, and the pottery discovered partakes of that mixed description know as British, Romano-British, or Roman pottery. Of indications of an earlier occupation than that illustrated by the rough air-dried earthenware technically known as British pottery no record exists; anything that can be properly styled "prehistoric" may be said to be conspicuous by its absence, the people whose remains are from time to time disinterred upon the Sussex Downs are mostly those of an age little antecedent to the Roman occupation; indeed the association that is continually met with in all such researches as at present, points to a common resting-place both for the native and colonising race.

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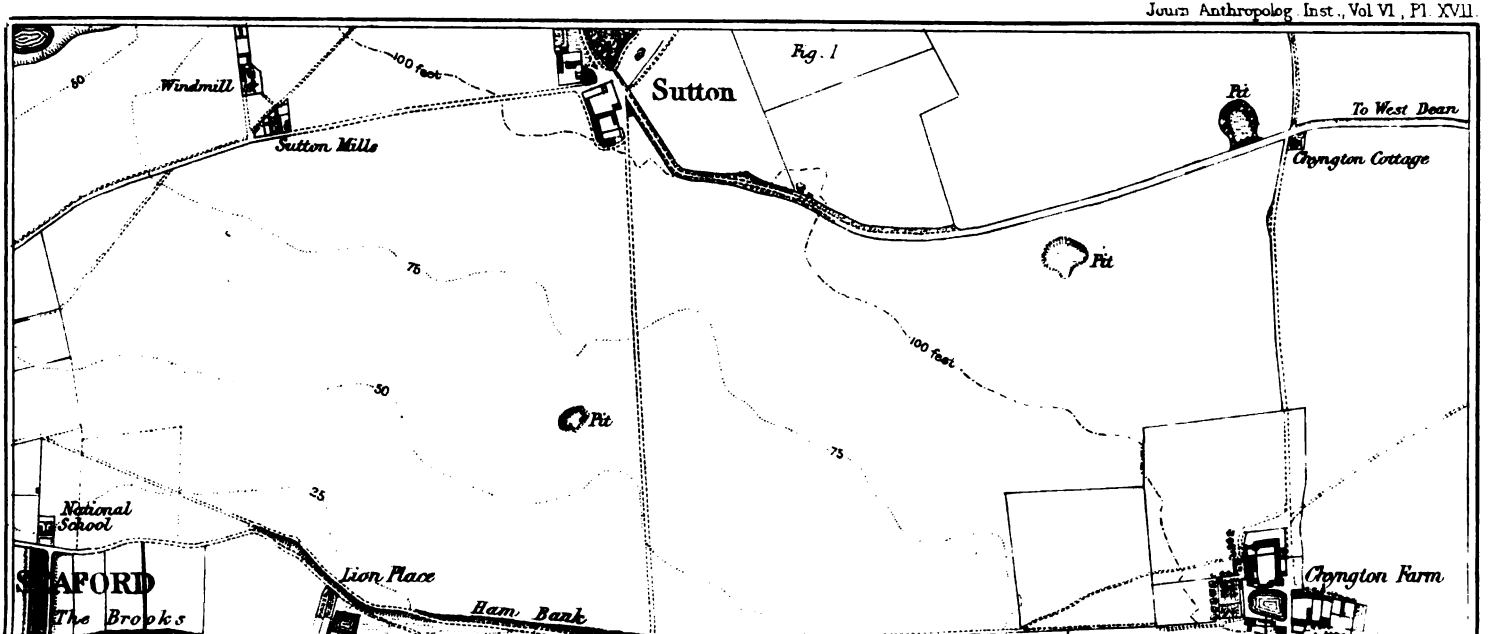
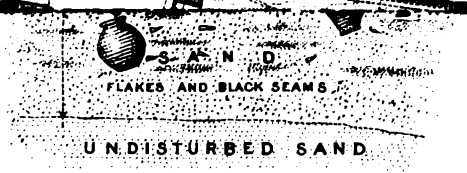




SECTION IN CEMETERY

1. Trench first opened.
2. Dug to 6 feet - nothing found.
3. Three Urns.
4. Black Plateau - fragments of pottery, scrapers.
5. Several black patches.
6. Three Urns.
7. Nothing found.

PLAN OF CUTTINGS IN CEMETERY

J. F. & W. H. ENSLIE, LITH., LONDON

SEAFORD, SUSSEX.

Notes *on the* Romano-British Cemetery *at* Seaford, Sussex. By F. G. Hilton Price, F.G.S., F.R.G.S., and John E. Price, F.S.A.

[*From the* Journal of the Anthropological Institute.]

By the kind permission of Mrs. Harison, of Sutton Place, and of the Rev. John Harison, Vicar of Bishopstone, we have been allowed to excavate the plot of raised ground near Seaford, commonly known as the Warren, and which has long since been pointed out by tradition as marking the site of a Roman cemetery. The position is so described upon the Ordnance map, and may be identified as being situate on Ham Bank, and defining, as it were, the boundary of an ancient trackway or road known as Green Street, which, starting from near the houses in Lion Place, may still be traced to the ancient property of Chyngton, or Chinting Manor, situate about a mile to the east of Seaford. Almost facing the cemetery another path or roadway may be observed. This is at right angles with Green Street, and runs in a direct line to Sutton Place or Manor,* the present residence of the Harison family. Crossing Green Street, this same path continues its course by the side of the cemetery, and is indicated by the dotted lines on the map as pursuing its course to one of the entrances of the great line of earthworks which exist on the summit of the hill. These earthworks are locally known as the Roman Camp.† They overlook the ancient channel of the river Ouse, and are situate but a short distance from the line of the Ermine Street, which, running from Pevensey and Chichester, continued its course through Surrey to the metropolis. Traditions connecting Seaford with the Roman occupation of Britain, long since led antiquaries to wild speculations as to its early history. An attempt was made to identify it with the

* Four manors formerly existed at Seaford, viz. Seaford, Sutton Sandore, Sutton Peverell, and Chinting, but they have become extinct. That of Sutton Sandore is of great antiquity. It is mentioned in the reign of King John as having belonged to William de Avrenches, who, when imprisoned as a rebel in the year 1216, had to purchase his release by the sale of this manor to the Abbey of Robertsbridge. In the Nonæ Returns for "*Sutton juxta Sefford*, 1341," an inquisition was taken as to the value of the church. Some interesting indications of the site of this early building were pointed out to us by the Rev. Mr. Harison, in a field adjoining his residence. Chinting, now represented by a single house, was an ancient township within the jurisdiction of the port of Seaford. The manor belonged, in the reign of Henry III., to Gilbert de Aquila, Lord of Pevensey and founder of the Priory of Michelham. The house is now the residence of W. W. Turner, Esq.

† The "Camp" is said to enclose an area of nearly twelve acres. That at Castle Hill, Newhaven, is about half the size. Similar entrenchments can be traced at Birling Gap. They enclose a high and also isolated portion of the cliff, the circumference of which measures about three-quarters of a mile. These fortified positions were probably, as suggested by the Rev. Edward Turner, in writing on the military earthworks of the South Downs, constructed for the defence of the valleys of the tide-rivers, by the intervention of which the continuous line of the South Downs is occasionally broken.

Castrum of Anderida, mentioned in the "Notitia" as being one of the nine fortresses which once served as a protection to the Littus Saxonicum, or Saxon Shore. This view was ingeniously advocated by the late Mr. Charles Verrall, in a communication published in Horsfield's "History of Sussex," vol. i. page 5; but of late years it has been universally admitted that the wonderful remains still existing at Pevensey alone answer the requirements of the claim.* It has been also suggested that Seaford, if not Anderida, may be identical with the Mercredesburn of the Saxon Chronicle, where, in the year 485, a great battle is known to have taken place between the South Saxons and the Britons. The late Dr. Tabor, a physician of Lewes, argued for Eastbourne as marking the site once defended by Ella, the Saxon chief; but a very competent authority on such matters, viz. H. L. Long, Esq., in a letter addressed to the late Mr. M. A. Lower, contributed the following valuable suggestions, which we are induced to quote as being strongly in favour of Seaford. "There is something," writes Mr. Long, "in the name of Seaford which I have often considered likely to throw some light upon the movements of the Saxon forces on their first invasion of our island. After Ælla (A.D. 477) landed at Cymensora, which I am disposed to think was Shoreham, he continued fighting his way to the eastward until he had made himself master of the entire coast, by the capture and destruction of Andredesceaster, or Anderida, in the year 491; but in the interval, A.D. 485, a battle of some importance appears to have been fought with the *Welsh* (*Belgæ*) at a place called *Mercredesburn*. This was a river, as the final syllable proves, as well as because the *bank* is mentioned.† The only river of any size in the line of these military operations is your river at Lewes, which then disembogued at Seaford, and which is of course, strategically, the exact place to expect to meet with such a conflict. Now, is not *Seaford* the Saxon translation of the British *Mearcraed*, as it is spelt in the Saxon Chronicle, but which, perhaps more correctly, would be *Mer* or *Mor*—Celtic for 'sea'—and *Rhy* or *Rhyd*, a 'ford'? There appears to be a superfluous *c* between the two words,

* In reviewing this subject, in his "Report on Excavations at Pevensey," 1858, Mr. Roach Smith proves that Anderida must be sought for between Lymne and the river Adur. In such a situation stands the Castrum at Pevensey, and there is no other camp or fortified place that could be substituted in place of it either in this limited track or throughout the whole line of what was called the Saxon Shore. "It must be understood," writes Mr. Smith, "that earthworks are quite out of the question. All the stations mentioned in the 'Notitia' are, or have been, castra built with strong stone walls."

† The passage in the Saxon Chronicle reads:—"An. Cccclxxxv. This year Ælla fought against the Welsh, near the bank of Mercreadesburn."

and it requires a Welsh or Armoric scholar to decide whether its introduction is not necessary." That usually far-seeing antiquary, Gough, does not appear to have been in any way familiar with Seaford, for in his edition of "Camden" he does not refer to its antiquities; and, had he been acquainted with its numerous illustrations of Roman occupation, it is more than probable that, while not accepting Pevensey, he would have given the preference to Seaford rather than to Newenden, in Kent, when speculating on the site of the long-lost Anderida.*

There is also documentary evidence of the existence of Seaford of a very early character. It is mentioned in the eighth century, among other places granted to the Abbey of St. Denis, near Paris. In the eleventh century it became the lordship of

William de Warrenne, and in the year 1229 we hear of it as a "member," or "limb," of Hastings, one of the Cinque Ports. Edward the Confessor is said to have been the first monarch who bestowed the immunities and privileges enjoyed by the five ports, representatives, doubtless, of the ancient stations to which we have reference as being under the command of the Count of the Saxon shore.

The first recorded discovery of Romano-British remains appears to have been that made in the year 1825, when, quite accidentally, a large number of sepulchral urns were exhumed. Trenches were being cut for the purpose of disturbing the rabbits, who were gradually undermining the ground, and in the

* See "Memorials of Seaford," by the late Mr. M. A. Lower. Sussex Arch. Collection, vol. vii.

course of these operations the urns were discovered. The late Mr. William Harison, of Folkington, had no less than twenty of these vessels. A selection from them was engraved some years since, in one of the volumes of the Sussex Archæological Collections, and we are indebted to the Council of this Society for the loan of the woodcuts for the purpose of comparison with the objects recently found. Since that time several coins have been discovered. They illustrate the reigns of Hadrian and Antoninus Pius, and as recently as the year 1854 a fine gold medal of Antonia, daughter of Mark Antony, was found, not in the cemetery, but in the shingle, below high-water mark. This, we believe, is now in the possession of J. Maxfield Smith, Esq., of Lewes. In the year 1856 a Roman urn was discovered at Cuckmere, in a heap of mould which had been dislodged from its position by a fall of a portion of the chalk cliff on the western side of the river. Traces also of this period were seen at the pond above what was the head of the æstuary, in the direction of Sutton. This was the site of a Roman saltpan; and quite recently it was stated by the late Mr. W. H. Black, F.S.A., that in his survey of Roman Britain he had been successful in tracing the stadia along the coast from Newhaven to this town. With such evidence of Roman occupation, the existence of a cemetery is not surprising. The spot was doubtless selected from its position with regard to Green Street, its close proximity to the camp, and the soft nature of the ground, its situation being upon the top of a natural mound of light sand, forming part of an outlier of the lower tertiaries. At the southern extremity of the mound the sand is quarried for building material. Reposing upon these sands is about 3 feet of made earth, and the greater part of the whole area is now overgrown with furze bushes.

The operations of the committee were commenced on the 5th June last. Our President, Colonel Lane Fox, F.R.S., E. W. Brabrook, F.S.A., and ourselves were present. The trench first cut was from east to west, it being a likely spot, as suggested by the Rev. John Harison, who informed us that it was near the site where the fine urns were discovered in the year 1825. Three men were employed at this place for the greater part of a day (this section is marked No. 1 on the plan), without any success at all, although we cut down to the virgin soil. We next made a

cutting, about 6 feet deep, at the spot marked 2, but there likewise without any favourable result.

Our attention was next turned to the eastward portion of the cemetery (section iii.), where we cut a trench about 5 feet deep, through about 3 feet of disturbed soil, which is filled with flints, stones, bits of pottery, flint flakes, &c. We soon became aware that we were on likely ground, by the presence of small black patches in the sand, and which we found was caused by charcoal and ashes. A large piece of a broken urn was shortly discovered, with portions of another. Simultaneously with the opening of No. 3 trench, we commenced a trial cutting north and south, at No. 4, particulars of which will be given further on. In section 3 a perfect urn* (No. 1) of red ware was met with at a depth of 3 feet 6 inches below the surface. Upon cleaning it, it fell in pieces, but was subsequently mended. It measures 32¼ inches round the widest part, 15 inches round the base, and is 11 inches high. This urn contained a secondary interment, and bears marks of being turned upon a lathe. There is no ornamentation. Urn No. 2† was discovered close to No. 1, and is the most ornamented one that we have yet met with. It is of dull red ware, rudely embellished with tooled markings, contained within deep concentric lines, and partly by bands caused by its being turned upon a lathe. It is 9½ inches high, 30 inches in circumference at the shoulder, and 14 inches round the base. It contained fragments of bones.

No. 3 urn‡ from the same section we were not so fortunate in getting out entire, it being in a very fragmentary condition and consisting of pottery of a light red colour. It is ornamented with two irregular lines round the shoulder, worked with a tool into the form of half hoops, resting upon concentric furrows. It is 8¼ inches high, 26¾ inches round the widest part at the shoulders, and 13½ inches at the base. It contained the usual amount of bones.

No. 4 urn was still more fragmentary. It is of a brownish red ware, with deeply-tooled furrows round the shoulder, in which part the pottery is much thicker than in the others. It bears marks of having roughly tooled ornamentation above the shoulders. Fragments of bones, &c., were found with it.

On the 11th September the excavations were resumed with three labourers. A trench was cut from north to south to a depth of about 5 to 6 feet; the upper surface of the ground was made earth. At the depth of 3 feet from the surface we found flint scrapers, flakes, and fragments of early pottery, which is of a very coarse description of native work. At this depth a black seam occurred, which we cut into, and traced it out for about 4

* See fig. 1, Pl. xviii. † See fig. 2, Pl. xviii. ‡ See fig. 3, Pl. xviii.

feet horizontally. It contained a large number of rough flints, pebbles, some of considerable size, fragments of pottery, bits of charcoal, &c. They all bore evidence of having been submitted to great heat. Much of the clay was red, and had the appearance of rotten roof tiles. As no bone ashes were distinguishable at this spot, we came to the conclusion that this was the place where the funeral pyre was erected. Among the flints we noticed two round flint balls. These may possibly have been used as sling-stones. There were no indications of bones, and this would be accounted for, presuming the spot to mark the site of a ustrinum. It was sometimes the practice of the Romans to wrap the corpse in a sheet of incombustible material, so that, being unconsumed, the bones of the deceased would be all preserved, and at the same time be prevented from mixing with the coals and ashes of the pyre.* Upon finding this blackness of the ground gradually assume its normal appearance, we turned our attention to further opening out that portion of the cemetery where the urns were met with in June last. Having set one man to make a trench at No. 5, about 6 feet deep from east to west, two other men were employed to cut back the ground to meet him at No. 6. For matters of convenience we have numbered these sections. In No. 5, at a depth of 4 feet from the surface, many black patches of *small* extent were found in the sand. They were all at the same level. These were evidently the ashes collected after cremation, as in some of them fragments of bones were observable. These may have been enclosed either in urns or in cloths which have perished, or by wooden coverings† that have met with a similar fate. In one of these patches a bronze nail was found, and in others a flint flake.

What did these interments point to? Were they the remains of people whose relations were unable to find an urn in which the remains would be preserved, or were the relics those only of slaves who had been sacrificed upon the funeral pyre of some great chief or person of authority, and whose remains were placed in an urn in close proximity, as a few feet further in towards No. 3, urns more or less perfect were found. The latter was a common practice, as is recorded by Mr. Llewellyn Jewitt in his "Grave Mounds and their Contents." On page 35 the following remarks will be met with: "In instances where the ashes of the dead have been collected from the funeral pyre and laid in a skin or cloth before interment, the bone or bronze pins with which the 'bundle' was fastened still remain, although, of course, the cloth itself has long since perished. In other instances small stones have been placed around, and

* See "Inventorium Sepulchrale," Fausett, p. 195. † See fig. 3, Pl. xix.

upon the heap of buried bones before raising the mound over the remains. It is frequently found in barrows, where the interment has been by cremation, that there will be one or more deposits in cinerary urns, while in different parts of the mound, sometimes close by the urn, there will be small heaps of burnt bones without any urn. The probable solution of this is, that the simple heaps of bones were those of people who had been sacrificed at the death of the head of the family, and burnt around him."

The bronze nail now found may therefore have been used in place of a pin to fasten together the ashes of the deceased in a sort of cloth or napkin. In the absence, however, of further illustrations, which we may get in future discoveries, this application of the nail is far from certain. Nails were sometimes employed to fasten together boxes or coffers, to contain either personal ornaments for interment, or even for the charred remains of the individual. Bronze nails are less common than those of iron. Representatives of no less than five varieties are given by Mr. Roach Smith, as occurring among the remains at Richborough.* They are at times richly ornamented, and were probably used for decorative work. The bronze pins usually found in such interments as the present are generally without heads. Dr. Thurnam mentions such objects as having been observed by Sir Rich. Colt Hoare in no less than thirty instances, and, with the exception of five, all were from interments by cremation, and with which they were often the only objects. It was assumed by Sir Richard that they were for securing the bundle in which the remains were enveloped; but careful comparison, says Dr. Thurnam, leads to the conclusion that they were implements carried about by their owners which, from their small size, were peculiarly liable to be committed with the body to the grave or pyre, as the case might be.†

In cutting "6," near to the left-hand corner, between 3 and 4 feet deep, we met with a large urn‡ of thick, dark brown pottery. It was much cracked, and the shoulders were broken in by the pressure of the earth above. We were successful in getting it out well, but immediately we began to take out the contents, which were much caked in, the sides gave way in the line of the old cracks. This urn had been rudely repaired before being placed in the ground. It measured 15 inches round the base, and about 25 inches round the middle, and was perfectly plain, having no ornamentation.

Besides the fragments of bones that were in the urn, there were three nails with large heads, and a fragment of metal,

* See "Richborough, Reculver, and Lyme," by C. R. Smith.

† Archæologia, vol. xliii. page 465.

‡ See fig 4, Pl. xviii.

which might have been a coin, or a portion of a fibula, or some other ornament, and a flint flake.*

Within a few feet of the same spot another urn was found, a small one of red ware, thin, having a row of small, vertical, black painted lines upon it, probably round the shoulder. The urn was so rotten that it was all in fragments when discovered, but the whole contents were carefully picked out on the spot. In addition to the usual bones, it contained a bronze fibula,† shaped like a bird's tail, attached to a round disc, which probably was intended to represent the body; the pin was wanting. This specimen affords a good instance of what the Saxons afterwards copied and elaborated.‡ Two small flakes were among the ashes, and a piece of jet.

Another urn, so much crushed that it was impossible to do more than pick out the pieces, was found within a foot of the latter. It was of black pottery, thin, having two concentric lines or furrows round the widest part, with diagonal markings between. In addition to the ashes and pieces of charcoal, it contained a pin of a fibula, a nail, a small lump of fused metal, probably the fibula or coins, and one small flint flake.§

Several other spots were met with at the No. 3 end of cuttings 5 and 6, where the sand was perfectly black from the ashes, but only a fragment of pottery was now and then met with in these patches, with a few small fragments of bone. In one of these black patches, a nail, a flint flake, and a corroded piece of bronze, were met with, which might have been the remains of a fibula; also fragments of what appeared to be burnt slates were occasionally seen.

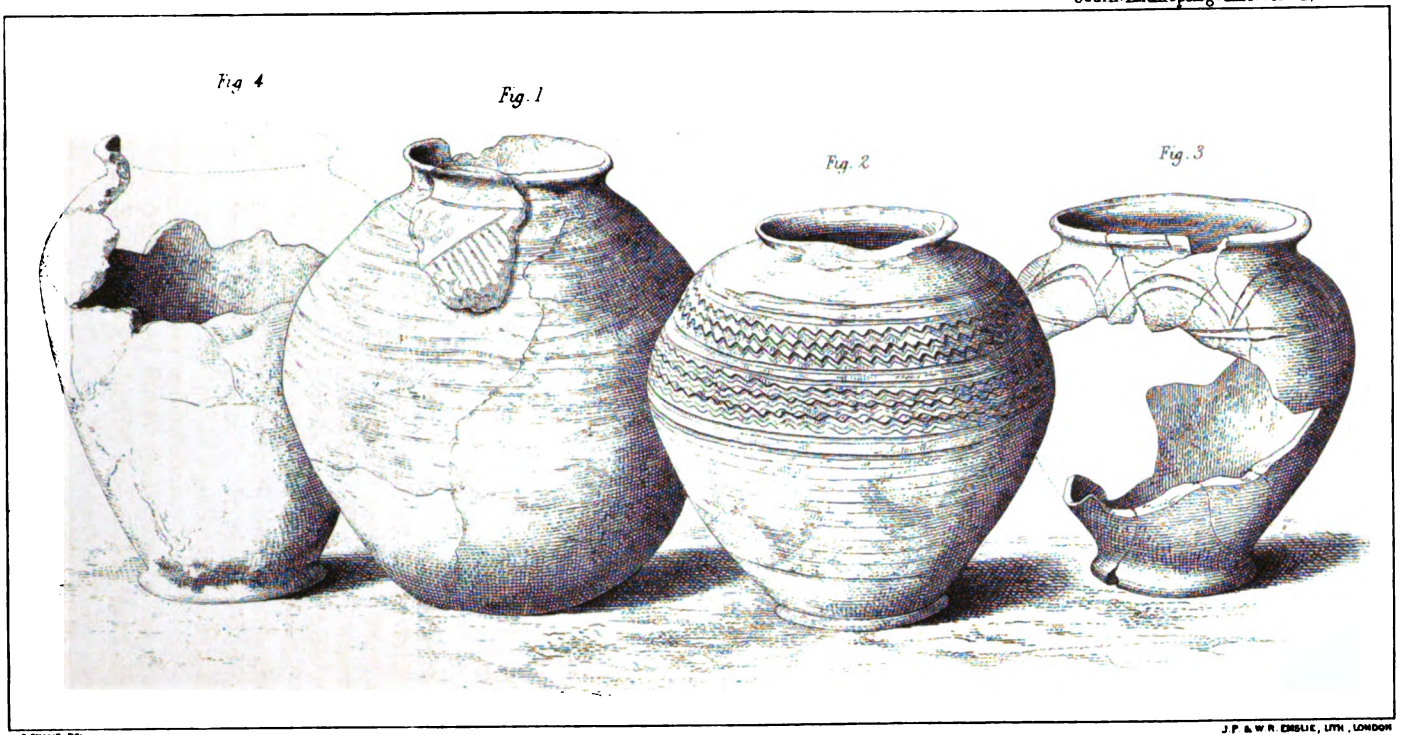
Of the iron nails referred to, they are but of small size, but ıtimes such objects have been found of considerable length. They have been thus observed in London, Colchester, York, and other places. In Mr. Roach Smith's "Collectanea Antiqua" (vol. 3), he devotes an interesting chapter to the illustration of the subject. He refers also to such nails as have now been found, as having appeared among the remains of bodies, which have either been burnt and deposited loose in the graves, or enclosed in urns of clay or glass. He quotes an example from a walled Roman cemetery discovered by the late Mr. C. Taylor

* See figs. 10, 11, 12, 13, Pl. xix. The fibulæ shown in figs. 1 and 2, Pl. xix. were found loose in the earth at the time of the diggings, and there was no evidence to show that they had been in any urn.

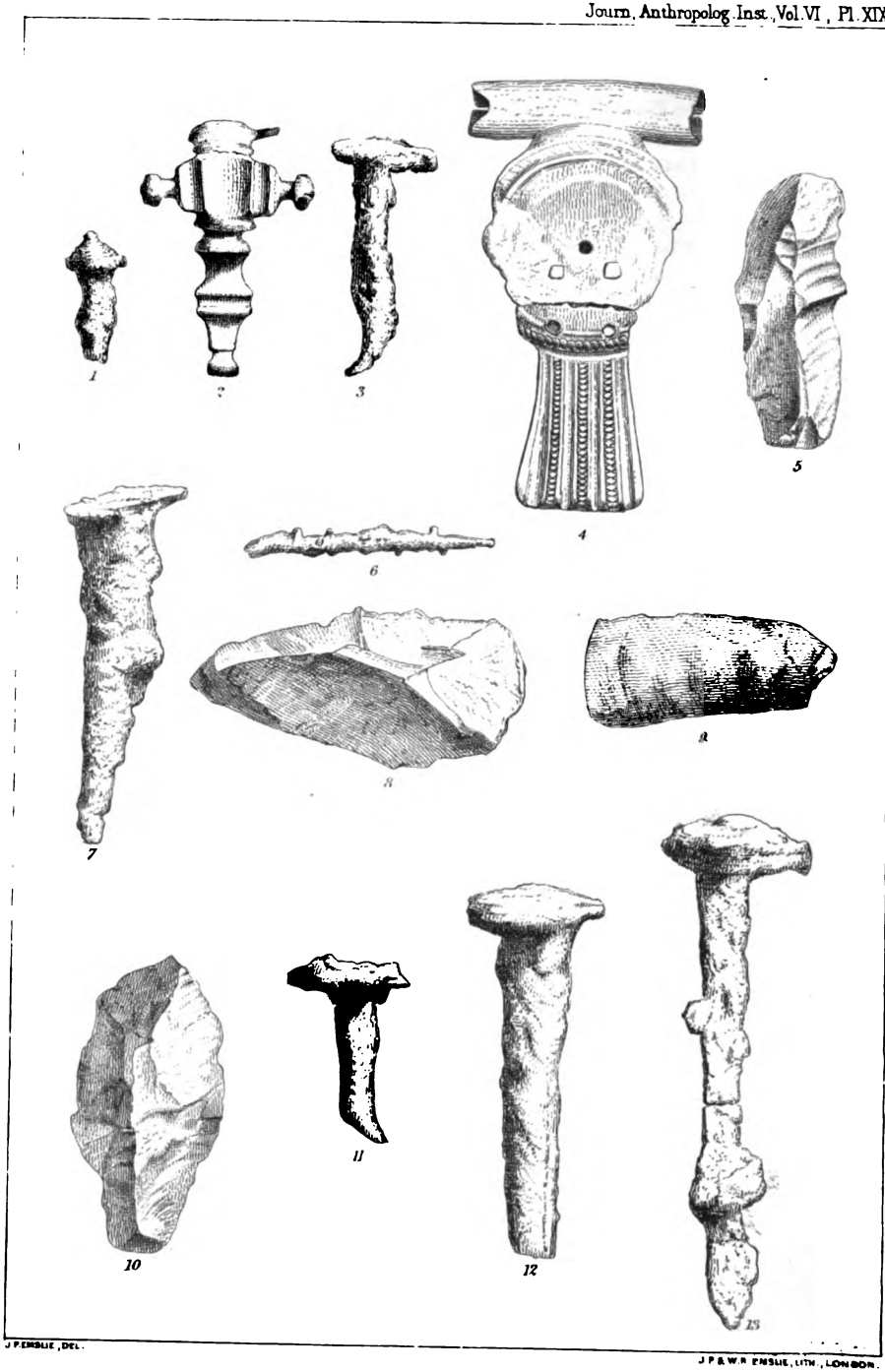
† See figs. 4, 5, and 9, Pl. xix.

‡ They strongly resemble certain bronze fibulæ found some years ago in the Crimea. In some excavations at Kertch, Dr. Macpherson found several such objects, accompanied by human remains. They are many of them in the British Museum, and are described and illustrated by Mr. Roach Smith in the fifth volume of his "C llectanea Antiqua."

§ See figs. 6, 7, 8, Pl. xix.



ROMANO-BRITISH POTTERY, SEAFORD, SUSSEX.



SEAFORD, SUSSEX.

Smythe, in Lockham Wood, near Maidstone, and excavated under the direction of that gentleman and Mr. Charles, of Chillington House. There was discovered a large number of vases, in one of which, of about the capacity of a gallon, was an iron nail in the midst of calcined human bones; it was perfectly free from rust, 2 inches long, and precisely similar to those of the present day. Mr. Wright also found many long nails in a large barrow near Snodland.

The presence of flint flakes or implements in the urns is a feature of considerable interest. Apart from instances of actual burial in the urns, they have appeared in large numbers among the charred remains, and were scattered about here and there, associated with broken pottery. Such conditions have been noticed by barrow-diggers in other parts of England. Dr. Thurnam mentions, among his Wiltshire researches, the presence of flint flakes and potsherds in considerable numbers, and usually in close proximity to the interments. They are traces, he writes, of a pagan custom, which is illustrated by the well-known line in *Hamlet*, of

"Shards, flints, and pebbles."

Various explanations of this practice of burying flint implements with cinerary urns have been given. Some attribute a symbolical meaning to both the potsherds and the flints; others suppose the sharp flints to be the knives with which the survivors lacerated themselves in signs of grief. On the whole, perhaps it is probable that the object in view was to lay the ghosts of the dead, and restrain them from walking the earth, it being asserted that flints, and other stones from which fire might be extracted, were efficacious in confining the manes to their proper habitations.*

At Alfriston, a village at no very great distance from Seaford, there existed a large barrow no less than 55 yards long. It is referred to by Gough, who also describes certain smaller tumuli and their contents—in one case an urn of unbaked clay, rudely ornamented, and containing bones and ashes. This was placed beneath a pyramid of flints.

Of the pottery but little need be said. It is rough in character, is probably of native, and perhaps of local manufacture. It resembles in every respect the earthenware that is usually met with in interments of this description. The vessels are for the most part such as would be in daily domestic use, and in the great variety that has been met with, we may have an indication that the cemetery—the first almost of its kind

* Compare Douce's "Illustrations of Shakspere," 1807, ii. 224; Arch. Journal, xxii. p. 117; Archæologia (Rollestor), 42, p. 428; Archæologia (Thurnam), vol. 43, p. 422.

that has been found in Sussex—may prove to be of far greater extent and interest than has been hitherto supposed, but much more remains to be done, and it must be admitted that the work belongs to labourers in the field of archæology rather than in that of anthropology. At the same time, the border-land between the two sciences is, to say the least, somewhat indefinite and obscure. Whatever information can be obtained to the advancement of the one can hardly fail to be of service to the other. No accurate knowledge of any site can be gained except by careful investigation of the place itself; and if, from the results of such exploration, we are enabled to derive additional knowledge of the habits and customs of the varied races who have lived and died upon this island, and who in each generation have left some distinctive features and characteristics that have influenced their successors, the accumulation of such facts must be of indirect service to anthropology, if not in its highest aims, yet of sufficient value to justify their record in the proceedings of the Institute.

FRAGMENT OF "SAMIAN" WARE

FOUND AT EASTGATE, GLOUCESTER

J. P. MOORE ARCHT. GLOUCESTER

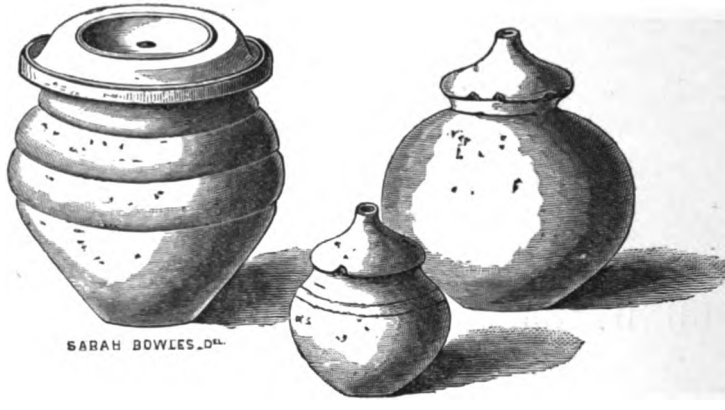
ROMAN URNS

FOUND NEAR RAINHAM CREEK, ON THE MEDWAY.

BY

HUMPHREY WOOD.

Ex Archaeologia Cantiana Vol XV
Pp 104 - 107

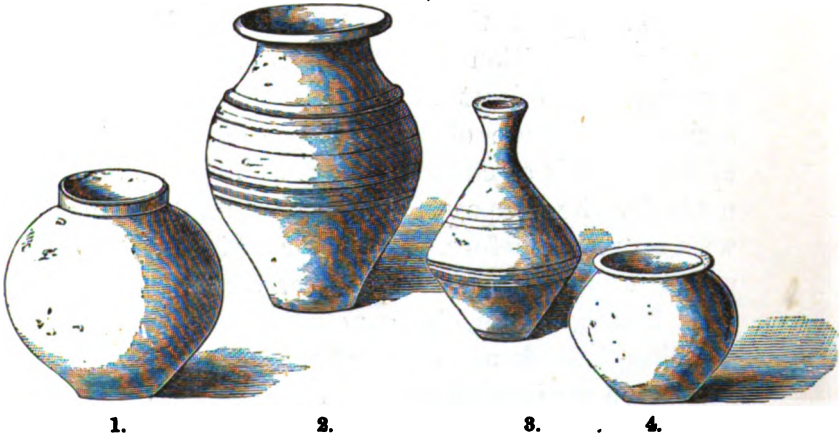


5. 6. 7.

ROMAN URNS FOUND NEAR RAINHAM CREEK, ON THE MEDWAY.

SEVEN Roman vessels were discovered in January 1881 by men who were digging clay from the "Saltings," on the north of Rainham Creek, between Bartlett Ness and Nor Marsh. They were 20 feet from the water's edge, standing on a level in an upright position, and in the form of a circle about 3 feet in diameter, at a depth from the surface of 10 to 14 feet. Three of the urns had covers on them, and these contained calcined human remains. At the bottom of the largest of the three was some long human hair, broad, plaited, and coiled round. The contents unfortunately did not share the care and

attention bestowed on the vessels, as they were dispersed during the "washing" operation, before they were seen by me. The heights of the vessels are—No. 1, 4½ inches; No. 2, 7¼ inches; No. 3, 6 inches; No. 4, 3⅛ inches; No. 5, 7 inches; No. 6, 3½ inches; No. 7, 6 inches.



1. 2. 3. 4.

The cover of No. 5 is a *patera* of the Samian pattern, but of different material. It is of a purplish hue, and has an attempt at a potter's mark on the interior; the familiar letters O F only being legible. The urn itself is different; coarse in material, and brown in colour. The urns Nos. 6 and 7 and their covers are of compact material, with smooth surface, of a purplish hue. The other vessels are coarser.

There are one or two points of interest attaching to this deposit. Mr. Roach Smith, in his paper* entitled *Remains of Roman Pottery on the Banks of the Medway, etc.*, alludes to the fact that funereal deposits had been discovered in the upper ground;

* See *Collectanea Antiqua*, vol. vi. The position of Nor Marsh is shewn in the map which accompanies that paper.

but not in the lower or marsh ground where these vessels were found, within a few feet of the water's edge. He adds that this lower ground is higher now by 2 or 3 feet than it was in the time of the Roman occupation. His opinion is supported, I think, by the great depth at which this discovery was made, viz., 10 to 12 feet below the surface. That it was a funereal deposit there can be no doubt from the orderly disposition of the vessels, and from the contents of at least three of them. It will be observed that three of the vases have the peculiarity of having lids or covers, two of which were evidently made for the purpose. I do not remember meeting with any such before. No other articles of domestic use or ornament than the smaller vessels were found. Mr. Roach Smith, in concluding his paper above mentioned, leads us to expect something further from his pen in connection with discoveries in this locality. It is to be hoped that he may take notice of the discovery of these seven vessels. They are at Chatham, in my possession.

REMAINS FOUND AT THE READING GAS-WORKS.

BY JOSEPH STEVENS, M.R.C.P.

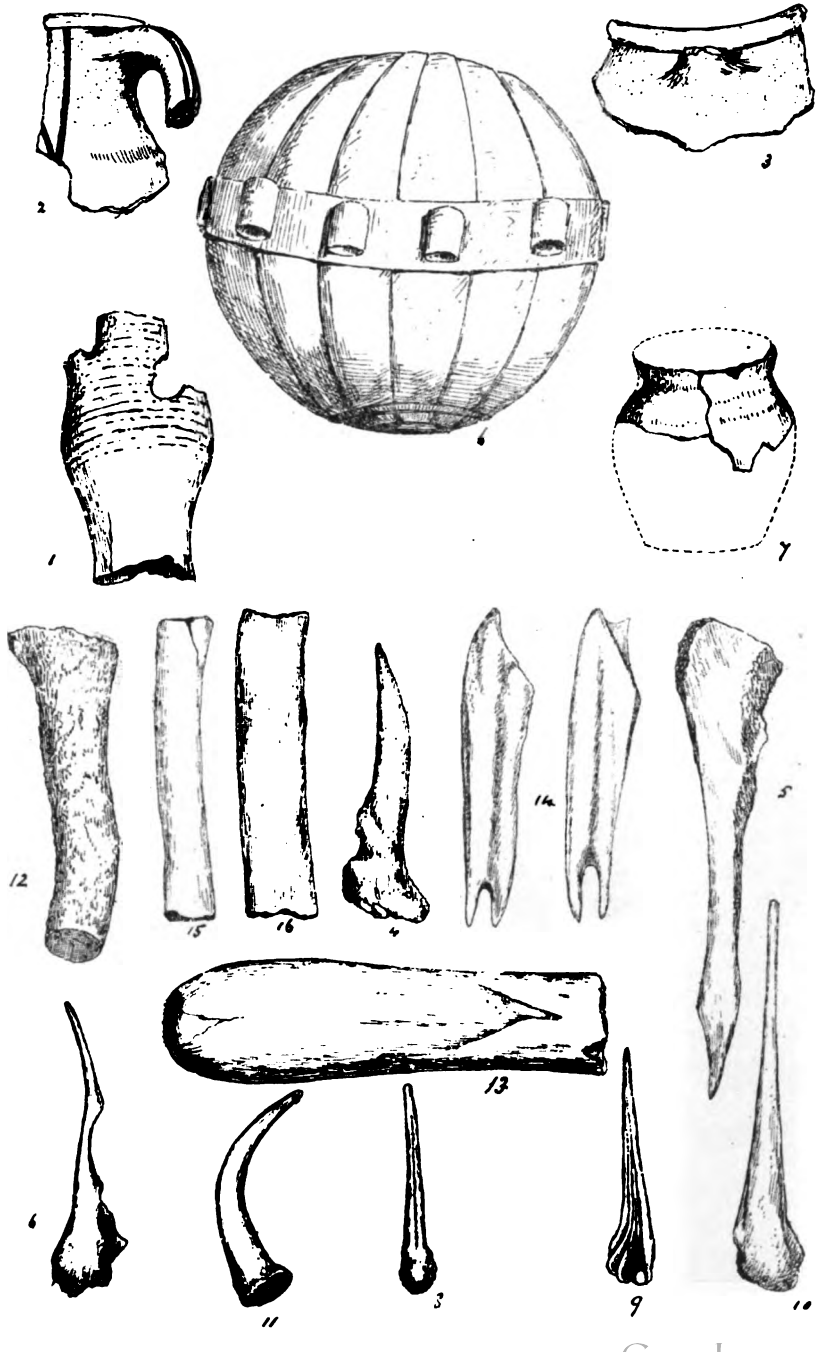
(*Read March* 16, 1881.)

DURING the summer months of 1880 some interesting remains were brought to light at the Reading Gas-Works, in cutting through the bed of the Kennet Valley in order to lay the foundation of a bridge which is now being built across the Kennet river. The section embraced the following stratifications: top soil, peaty, 3 feet; silt of the old Kennet river, 5 feet; a layer of peat, 3 feet; and a bottom bed of shell-marl, 6 feet; the whole, 17 feet.

The remains, which were placed in my care by the Board of Gas Directors, in order that a series of them may be arranged in the future Reading Museum, consisted of bones of wild animals long since extinct, and others which had been domesticated in Roman times, together with pottery of different periods, and instruments of rude character, constructed from the bones of animals similar to those among which the implements were found. These relics, according to their arrangement in the different stratifications, naturally fall into the comparatively modern, mediæval, and Romano-British, the last being confined to the peat and shell-marl.

The articles in the upper division consisted of the bones of animals similar to those now in use; and a quantity of coarse, hard-baked, plain German stoneware of the sixteenth century, chiefly in jugs, pitchers, and bottles; with some sections of seventeenth century ware, shewing rude ornamentation. There were also a number of small clay tobacco-pipes, known as "Fairy-pipes", which may be ascribed to any period since the reign of Elizabeth; a coin of Louis XIV; and two keys with annular bows, which I should regard as of the seventeenth century,—those of earlier date being of much more elaborate design. Thus in the thirteenth and fourteenth centuries key-bows were of a lozenge-pattern; in the fourteenth and fifteenth cen-

Roman Remains found at Reading.



turies, they were trefoil in shape, and of considerable variety; and when annular, were not unfrequently filled in with designs participating of the architectural decorations of the period. Later, in the sixteenth century, keys were very varied and fanciful in design; the decorations at the time of Elizabeth consisting of scrolls, cyphers, crosses, etc., very ingeniously and tastefully interwoven.

In the mediæval division the relics, which were found chiefly at the base of the silt of the old Kennet river, consisted of fictile ware of various kinds, of which the fine specimen (fig. 1) is of thin, red ware, partially glazed of a bright brown. It has a hole at the upper part of the swell, which appears to have been artificially made. It is of the fourteenth or fifteenth century. Other sections of vessels, such as figs. 2 and 3, bear a bright green glaze (silicate of lead) blotched with black. The paste is a soft buff, and the glaze is evidently intended to render the vessels less porous to fluids. It is of about the fourteenth century. Some bases of vessels have thumb-impressions on the exterior, with corresponding finger-nail marks on the interior (figs. 4, 5). These are of the fifteenth century, if not earlier; and there are portions of thickly glazed bowls in red ware, of about the same date. The "crocks" were all portions of pitchers or bowls, the plates and dishes during the middle ages being mostly of wood or pewter.

In the same division should, perhaps, be placed the article fig. 6. It is of silver, weighing 1½lb., and measuring 28 inches round its belt. It has the appearance of the brass chandeliers formerly in use for lighting religious edifices. It is probably a "trendell", used to bear the candles which were lighted in front of the rood. There are notices in the churchwardens' books (1523) of St. Giles' and St. Lawrence's, Reading, and also of St. Helen's, Abingdon, regarding payments for lighting and repairing the trendell. As the pottery and other remains were found at the back of the Abbey, the inference is that they were formerly used at the Abbey tables, etc.

Arriving at the lowest substrata, the peat and marl, the pottery, animal remains, and bone implements, are referable to Roman times; unless the rim and upper portion of a large unburnt, hand-made urn (fig. 7), which

appeared at this time, should dictate a period as distant as the Celtic for some of the articles. The vessel is such to which the term Celtic is usually applied; but I should consider that, as in the case of the large hand-made "craggans" still found in association with modern household implements in the Isle of Lewis, the urn, although Celtic in character, should be included in the Romano-British series. The ordinary Roman pottery consists of remnants of bowls, basins, saucers, and fragments of pitchers, of the commoner culinary kinds found at Roman sites.

The marl furnished one specimen undoubtedly Celtic, a well wrought polished greenstone hatchet; and it is not improbable that some of the rude bone tools may be ascribed to the same period. The axe is of similar type to a ground hatchet shewn in fig. 59 in Dr. Evans' work, *Ancient Stone Implements of Great Britain.* Its length is $4\frac{1}{4}$ inches; the edge is sharply wrought, and the side-angles are slightly rounded.

Among the animal bones are some of considerable interest and rarity, as the beaver, wolf, and wild boar. That they have lain in contact with peat is shewn by the colour they have derived from the iron during vegetable decomposition. Many of the bones bear calcareous incrustations from the marl: indeed, some of the skulls were filled with the *débris* of land and freshwater shells from the marl, together with bones and teeth of fish, cherry-stones, and broken hazel-nut shells, which had been washed in at the time of their deposition. The beaver has been found in association with similar animal remains in the peat of the Kennet at Newbury;[1] and the discovery of tusks of wild boar, with hazel-nut shells, has received notice as having occurred at Abingdon.[2] In the Reading series the following have been recognised:—gigantic ox, urus, *Bos primigenius;* long fronted or Celtic ox, *Bos longifrons;* wild boar, *Sus scrofa;* hog, a sub-species; goat, *Capra hircus;* wolf, *Canis lupus;* dog, *Canis familiaris;* fox, *Vulpes vulgaris;* beaver, *Castor Europeus;* horse, *Equus caballus;* red deer, *Cervus elaphus;* fallow deer, *Cervus dama;* roe (?), *Cervus capreolus;* sheep, horned

[1] *Transactions of Newbury District Field Club*, vol. ii, p. 1[illegible]9.
[2] Owen, *British Fossil Mammals and Birds*, p. 430.

and unhorned, *Ovis*. The bones of some smaller animals have not yet been satisfactorily determined,—perhaps wild cat and otter; also of several species of aquatic birds.

It is stated by Mr. Walter Money[1] that until the year 1226 the royal forest of Windsor extended as far as Hungerford, in which year the Kennet Vale was disafforested by royal charter. Independently of this, there is no doubt that forest had a wide range in Roman times, the clearances for purposes of agriculture being chiefly due to the Saxons. It need not excite surprise, therefore, that the wild inhabitants of these forests should have left their bones in the turbaries or sub-turbary marls. Their remains might have found their way to the spots where they lie buried in various ways, as the spoils of the hunter, animals that had been used for food, or of forest animals which had become mired or died, and were washed down during flooded periods, and lodged in angles and reaches along the river-courses.

The instruments made from bone were many and various, and being mostly pointed, might have served the purpose of awls, drills, or punches, even if some might not have been weapons (fig. 5). Some are made from the ulnar bones of red deer, ox, and apparently goat (figs. 4, 5, 6); in some cases the elbow being cut off (figs. 4, 5), in others not (fig. 6). Pointed implements are made from the metacarpal bones (rudimentary) of deer (figs. 1, 2) and perhaps horse (fig. 3). "Snags" of deer-horn have been cut for some purpose (figs. 8, 9); in some instances worn at the point with use (fig. 8); and fragments of deer-antler are sawn and shaped in a manner for which it is difficult to assign any definite purpose. A large rib of *Bos* is somewhat spoon-shaped (fig. 7), and might have been intended for a marrow-spoon or scoop; and as all the long bones were split open, and the skulls smashed, it is likely the intention was the extraction of the marrow. Some of the leg-bones have the appearance of their softer articulations having been gnawed by dogs or wolves. But the most interesting series appears to be those represented in figs. 10, 11, and 12; and as more than one hundred specimens were found in a very small space, they appear to indicate a local industry. One set of these implements, of which

[1] *Transactions of Newbury District Field Club*, vol. ii, note to p. 131.

an example has been forwarded (fig. ~~10~~ 14), is formed from plates of bone split off from the bases of the lower jaw-bones of the Celtic ox. One end is left rough, as separated from the bone, the other is shaped in a loop; and there is little doubt it was intended for a shuttle to make fish or forest-nets.

The accompanying instruments (figs. ~~11~~ 15, ~~12~~ 16) are portions of ribs of *Bos*, deer, and some smaller animals, which from their cut ends and polished appearance have evidently been used; and it is likely were tools for forming the meshes or loops, the ribs used being of different sizes, implying that they were intended to construct nets of varying coarseness. A portion of a net made with a pair of these rude tools has been forwarded to me by Mrs. Cunnington of Devizes, in demonstration that such might have been their application.